VERBAL CLITIC MOVEMENT IN POLISH--EXPANDED AGR PHRASE IN THE
MINIMALIST PROGRAM PERSPECTIVE

BY

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This dissertation deals with movement of verbal clitics
in Polish in terms of expanding the AGR phrase. The analysis
follows Chomsky's Minimalist Program. Different contemporary
research approaches to dealing with verbal clitics are
discussed. These all follow the argument that clitics can be
subsumed under the AGR phrase. Though descriptive, these
analyses are not sufficient to explain the conditions for
verbal clitic movement in Polish. Following the historical
progression of the Polish verb paradigm from pre-16th
century to the present, I propose viewing the clitic
movement in terms of gender, number and person features on
the verb. With the Minimalist Program model for syntactic
data, I propose an expansion of the AGR phrase with a
separate gender node. Polish data support my argument of
positing a phonologically recoverable gender feature
condition on the verb, which must be satisfied in order for

verbal clitics to move. Absence of the condition prevents movement from occurring.

CHAPTER 1

INTRODUCTION

The problem of classifying clitics in Polish rests on
the fact that the typical clitic treatment approaches have
dealt with clitics as pronominals (Borer et al. 1986,
Armstrong 1989). The overt case markings on the pronominal
system make it a good object of study. Unlike cliticizing
formations in languages like French, Spanish and Italian
(Jaeggli 1986, Mallen 1990, Mallen 1992, Manzini 1986, Rizzi
1986, Toman 1986, Wehrli 1986), Polish is much freer in
placement of the pronominal clitics. Wackernagel's
Law, as interpreted in Anderson (1993), appears to hold in
it as well. Other approaches to classifying clitics have
taken the taxonomic route like Klavans (1982) and Zwicky
(1977).

In Klavans' differentiation of verbal (pronominal) and
2P clitics (enclitic on leftmost node of the surface phrase
marker), verbal clitics are attracted to a specific category
(verb), while 2P clitics are contingent on the linear notion
of 'position' and the notion 'constituent'. In the Polish
pronominal clitic paradigm, there appears to be some
divergence from the Klavans approach (if Aux clitics are in
situ). Unlike Romance clitics, there is no [+tense] for

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proclisis and [-tense] for enclisis stipulation as in the following from Klavans:

(1) a. Di=me=lo

  b.*me lo di

  'Tell me it'

(2) a. Magdalena esta cantandolo.

  b.*Magdalena esta lo cantando.

  'Magdalena is singing it.'

Polish follows the pattern of Archaic Spanish :

(3) Que me tu dizies

  That to-me you say-FUT

  'that you will tell me'

In these instances the category on the host was not as strict as in Modern Romance, and before 'que em' became 'quem'

Thus (4) is equivalent to (5):

(4) Że mi ty powiesz.

  That to-me you-NOM tell-FUT

  'That you will tell me'

(5) Że ty mi powiesz.

  That you-NOM to-me tell-FUT

  'That you will tell me'

The only requirement for ordering pronominal clitics is in the enclitic position where Dative would precede the Accusative, as in (6) and (7).

   (6) a. ..... V clDAT clACC

      b. *.... V clACC clDAT

   (7) a. ..... przyniesiesz mi go

             bring-FUT me-DAT him-ACC

      b. *.... przyniesiesz go mi

             bring-FUT he-ACC me-DAT

Polish has corresponding stressed pronominal versions of pronominal clitics as in the following paradigm:

DAT-mi:mnie, ci:tobie, memu:mojemu, mu:jemu:niemu,

ACC-mię:mnie, cię:ciebie, go:jego:niego,

GEN-mego:mojego

The pronominal clitics will therefore appear in unstressed positions, with Klavans utilizing the same phenomenon as an explanation for preventing /IM/ from appearing in isolation as a reply to:

   (8) Who is it? <u>Him</u>

Verbal Clitic Attachment

The phenomenon of Polish verbal clitics freely attaching within the CP boundaries has been problematic for clitic theories so far. Topicalization and scrambling have been approached as one answer to the "Free Word Order Phenomena" (Gorecka 1988) but that approach and the other theories would not be able to account for the grammaticality of clitic attachment to scrambled object NP in (10), (12),

(14), (16) below and the barring of verbal clitic movement
in (18) and (20).

(9) (Ja) da=ł=em/da=ł=am Janowi   książkę.

(I) give-PAST1mSg/fSg John-DAT book-ACCf

'I gave John a book'

(10) ?Książkę=m   dał/dała   Janowi.

book-ACCf=cllSg give-PASTSgm/f John-DAT

(11) (My) da=ł=i=śmy/da=ł=y=śmy Janowi książkę.

(We) give-PAST1mPl/1fP1 John-DAT book-ACCf

'We gave John a book'

(12) Książkę=śmy dali/dały   Janowi.

book-ACCf=cllP1 give-PASTP1m/f John-DAT

(13) (Ty)   da=ł=eś/da=ł=aś   Janowi   książkę.

(You)-Sg give-PAST2mSg/2fSg John-DAT   book-ACCf

'You (Sg) gave John a book'

(14) ?Książkę=ś   dał/dała   Janowi.

book-ACCf=2Sg give-PASTSgm/f book-ACCf

(15) (Wy) da=l=i=ście/da=ł=y=ście Janowi książkę.

(You) P1 give-PASTm2P1/f2P1 John-DAT book-ACCf

'You (P1) gave John a book'

(16) ?Książkę=ście dali/dały   Janowi.

book-ACCf=2P1 give-PASTP1m/f John-DAT

(17) (On/ona) da=ł/da=ła   Janowi książkę.

(he/she) give-PAST3Sgm/f John-DAT book-ACCf

'He/she gave John a book'

(18) *Książkę=ż/ża   da/da Janowi.
book-ACCf=cl3PAST3Sgm/f give John-DAT

(19) (Oni/one) da=li/da=ły   Janowi   książkę.
(They-mf) give-PAST3Plm/f John-DAT book-ACCf
'They gave John a book'

(20) *Książkę=li/ży   da/da Janowi.
book-ACC=cl3PASTPlm/f give John-DAT

Clitic attachment to scrambled object NP can be
illustrated in the following paradigm:

	Sg	Pl
I	?/OK	OK
II	?/OK	OK
III	*	*

Looking at data illustrating clitic attachment to Comp of
embedded CP), the present tense inflection does not have a
phonologically realized gender feature, and movement is
impossible.

(21) Maria   myśli   że   (ja) daj=ę
Maria-NOM think-PRES3Sg that (I) give-PRES1Sg
Janowi   książkę.
John-DATm book-ACCf
'Mary thinks that I give John the book'

(22) *Maria myśli że=ę   daj   Janowi   książkę.
thatCl1Sg give-PRES John-DAT book-ACCf

(23) Maria myśli że (ty) daj=esz   Janowi
                 that (you) give-PRES2Sg John-DATm

     książkę.

     book-ACCf

     'Mary thinks that you give John the book'

(24) *Maria myśli że=esz daj   Janowi   książkę.
                 thatCl2Sg give-PRES John-DATm book-ACCf

(25) Maria myśli że (on/ona) daj=e   Janowi
                 that (he/she) give-PRES3Sg John-DATm

     książkę.

     bookACCf

     'Mary thinks that he/she gives John the book'

(26) *Maria myśli że=e   daj   Janowi   książkę.
                 thatCl3Sg give-PRES John-DATm bookACCf

(27) Maria myśli że (my) daj=emy   Janowi
                 that (we) give-PRES1Pl John-DATm

     książkę.

     book-ACCf

     'Mary thinks that we give John the book'

(28) *Maria myśli że=emy   daj   Janowi
                 thatCl1Pl give-PRES John-DATm

     książkę.

     book-ACCf

     'Mary thinks that we give John the book'

(29) Maria myśli że (wy) daj=ecie   Janowi
          that (you) give=PRES2Pl John-DATm

ksiażkę.

book-ACCf

'Mary thinks that you give John the book'

(30) *Maria myśli że=ecie daj   Janowi   ksiażkę.
              thatCl2Pl give=PRES John-DATm book-ACCf

(31) Maria myśli że (oni/one) daj=a Janowi
              that (they-m/f) givePRES3Pl John-DATm

ksiażkę.

book-ACCf

'Mary thinks that they give John the book.

(32) *Maria myśli że=a   daj   Janowi   ksiażkę.
              thatCl3Pl give-PRES John-DATm book-ACCf

<u>Gender Feature Proposal</u>

Features need to be phonologically realized, since 0
marking for gender will generate * structures, i.e. (22),
(24), (26), (28), (30), (32). In (18) and (20) the gender
and person features are not extractable separately from
tense marking, therefore movement is barred. If AGR would be
postulated with available slots for person, number, and
gender, then movement would be barred if gender is not

available as a separate entity for movement from the AGR
gender node, which would be 0.

AGR Approach

In Chapter 2, different contemporary approaches will be
analyzed in terms of their treatment of Polish verbal
clitics. Chapter 3 will present Decaux's (1955) historical
analysis of the evolution of the Polish verbal system and
the ensuing absorption of gender, person and number features
onto the verb. Andersen (1987), Halle (1990) and Jakobson
(1984) will further show the need for approaching the Polish
verbal system with a separate treatment of gender features.
In Chapter 4, after introducing Chomsky's Minimalist Program
and its implications for Polish, I will argue for the
subdivision of the AGR phrase beyond AGR_s and AGR_o
designation. Chapter 5 will deal with phonological
considerations of clitic attachment, the special status of
the verb 'być' (to be) in Polish, and show that it is not a
counterexample to my expanded AGR phrase analysis even if
constructions allowing attachment of that verb's
inflectional clitics are possible with a [-tense]
construction.

(33) Maria myśli że (ja) jest=em w domu.

    Mary-NOM think-PRES that I) be-PRES1Sg at home-LOCm

    'Mary thinks that I am at home'

(34) Maria myśli że=m   jest   w domu.

              that=Cl1Sg be-PRES at home-LOCm

    The role of 'być' as the 3rd person default function and
the special status of the verb 'to be' will also be analyzed
in Chapter 3, where I will show that its special treatment
also has historical basis and does not constitute a
counterexample to my gender feature recoverability condition
on the verb in order for clitic movement to occur.

CHAPTER 2

RESEARCH APPROACHES TO THE TREATMENT OF CLITICS

There have been many different approaches to
classifying clitics. Klavans (1982) and Zwicky (1977), in
taking the taxonomic route, have specified parameters as the
classifying tool. Others, like Decaux and Andersen, have
chosen to reconstruct the history of clitic formation.
Others, like Borer et al., have fitted clitics into a
specific linguistic theory. Keyser and Roper specify a
category-neutral abstract clitic position for English while
stating that the clitic position is "in fact universal"
(1992:89). Booij and Rubach derive clitics in the lexicon,
and Szpyra proposes a looping model of phonology-morphology
interface which is supposed to allow clitic formation.
Aguado and Dogil posit a model in which phonological rules
must have access to representations, whether or not the
representations were derived. Ciszewska argues for a
separate AGR and Tense projection, and Kipka specifies a +/-
Past condition for verbal clitic movement in his treatment
of Polish impersonals. Halpern bases his very extensive
analysis of clitics in the realm of morphology. Clitics are
generated in AGR, according to Armstrong, but without

expanding the AGR phrase. That approach, like the others, cannot account for the data in Chapter 1.

The Parametric Approach

Klavans sets out to represent clitics within the theory of morphology and word structure. Cliticization is one of the processes that shows a mismatch between a morphological word and a phonological word. It also involves syntactic processes which affect the internal structure of the word. Some of the other processes affecting word internal structure are case-marking, agreement marking, Noun Incorporation, and phrase morphological marking. The problem Klavans deals with is that the subject matter is comprised of sets of words, grouped at the level of syntax, but at the same time undergoing lexical rules and phonological rules, the latter selectively. This makes them behave as if they were single lexical items. Klavans originally proposed a system which is capable of constraining clitic positioning, based on the following assumptions. (1) Cliticization is a unitary phenomenon and (2) cliticization possibilities can be captured by five binary parameters.

In her 1982 IULC edition, Klavans compresses her original five parameters into three. The first two become

part of the lexical entry of a given lexical item, i.e.
specification of the entry itself and specification of the
lexical category.

Enclitics would look like:

(35) -[[_____]- = enclitic]
    X   X
Proclitics would be represented as:

(36) -[proclitic = -[_____]]
    X   X

The three parameters proposed by Klavans would pattern
in the following way:

(37) Parameter One: Initial/Final
    Parameter Two: Before/After
    Parameter Three: Proclitic/Enclitic

Configurational information is encoded in the first two
parameters, while the third carries phonological information
about the direction of phonological attachment (liaison).
DOMINANCE is encoded in the first parameter while linear
PRECEDENCE is encoded in the second parameter.

Klavans bases her parameters on observations of
placement and attachment possibilities of clitics. From
these observations she draws the descriptive statements from
which she forms the three parameters. In order for this
analysis to fit into a theory of morphology she proposes
that the parameters, in their role as descriptive
statements, are a derivative of the more fundamental
properties of lexical items, i.e. independently motivated

subcategorization frame which is required on lexical items, and general constraints on applying phonological rules.

Klavans claims that cliticization is in fact phrasal affixation. This would imply that a reflection of this be present in the lexical representation of clitic. Clitics attaching to phrasal nodes comprise the majority of clitics Klavans researched. The French and Spanish verbal clisis, which has V as the relevant domain, appears to be an exception. In order to get around this, Klavans proposes a constraint on the lexical representation of clitics. A necessary part of lexical representation of clitics was a phrasal requirement on the domain of cliticization. She backs away from this in her later version by stating that this requirement might be too strong, since it would result in elimination the Spanish and French type of Verbal clitics. Klavans analyzes them now as true verbal features, changing the subcategorizing bracket from V' to V.

Approaches to Scope

The question of scope of cliticization in languages such as French, Italian and Czech was analyzed by Toman (1986). In it he states that in these languages the scope of clitics covers only the VP. This would prevent them from occupying a position in which they would have maximal domain

of c-command, extending over the CP. When clitics follow COMP, as in Czech (and also in Polish) they would occupy that position. Toman (1981:299) expounds on wh-movement to COMP in Czech and Polish, settling on scrambling. This would be formally represented as adjunction to S.

Scrambling is also used by Dyla to propose an S' deletion for Polish. In his analysis, Dyla cannot account for some exceptions to S' scope of CM (clitic movement) and scrambling unless the S' boundary can be deleted. Though at first it would seem that his data show that to be true, a closer analysis would explain the exceptions as a question of government and theta-role assignment of certain verbs, the analysis put forth in Toman (1986) and Mallen (1990, 1992). In (38) (Dyla:328), the clitic Dative pronoun 'mu' is scrambled all the way into COMP (38-41), generating an ungrammatical structure when CP (Dyla's S') is crossed (42-43).

> (38) Marek zauważył, że wczoraj ktoś
>
>   NOM   noticed   that yesterday somebody/NOM
>
>   zabrał mu   książkę.
>
>   took   him/DAT book/ACC
>
>   'Marek has noticed that somebody took a book
>
>   from him yesterday'

> (39) Marek zauważył, że wczoraj ktoś mu zabrał
>
>   książkę.

(40) Marek zauważył, że wczoraj mu ktoś zabrał
     książkę.

(41) Marek zauważył, że mu wczoraj ktoś zabrał
     książkę.

(42) *Marek zauważył mu, że wczoraj ktoś zabrał
     książkę.

(43) *Marek mu zauważył, że wczoraj ktoś zabrał
     książkę.

The following are presented by Dyla as apparent
counterexamples to S'-boundedness for CM and NP scrambling
(330):

    (44) Marek obiecał/przyrzekł ogolić   się
        NOM   promised   to-have-shaved REFL
        'Marek promised to shave himself'

    (45) Marek obiecał/przyrzekł się ogolić.

    (46) Marek się obiecał/przyrzekł ogolić.

    (47) Marek obiecał/przyrzekł przynieść tę książkę.
        NOM   promised   to-have-brought book/ACC

    (48) Marek obiecał/przyrzekł tę książkę przynieść.

    (49) Marek tę książkę obiecał/przyrzekł przynieść.

In CM examples (44-46) and NP scrambling in (47-49), the
fact that there is no object subcategorization by the verbs,
'Marek' is (A) for both verbs (following Mallen:1992
analysis) and 'ogolić' and 'przynieść' are [-tense], (with

for case and theta chains) can explain the phenomena without
resorting to a stipulatory S' deletion condition. Even Dyla
himself addresses the implication of his S' deletion
analysis in terms of PRO, which with his analysis would not
always be ungoverned, leaving the onus of proof on Case
assignment (336). Thus the structure of (50) would pattern
as (51a) at D-structure and (51b) after Verb Raising,
following Dyla's S'-deletion analysis (333,335):

(50) Marek$_i$ kazał Tomkowi$_j$ umyć   swój$_{i/j}$

NOM   ordered DAT   to-have-washed REFL's

samochód.

car/ACC

'Marek$_i$ ordered Tomek$_j$ to wash his$_{i/j}$ car'

(51a) [$_{S'}$[$_S$[$_{NP}$ Marek] [$_{VP}$[$_V$ kazał] [$_{NP}$ Tomkowi]
[$_{S'}$[$_S$[$_{NP}$ PRO] [$_{VP}$[$_V$ umyć] [$_{NP}$[$_A$ swój]
[$_{NP}$ samochód]]]]]]]]

(51b) [$_{S'}$[$_S$[$_{NP}$ Marek] [$_{VP}$[$_V$ kazal] [$_{NP}$ Tomkowi] [$_S$[$_{NP}$ PRO]
[$_{VP}$[$_V$ umyc] [$_{NP}$[$_A$ swoj] [$_{NP}$ samochod]]]]]]]]]

    In Toman's (1986) model, clitics following COMP would
fail to exhibit subject/object asymmetries (144). Toman
analyzes cliticization from NP's in Czech as contrasted with
cliticization from NP's in French and Italian by positing
extraction from NP for Czech and PP for French and Italian.
For Toman, the problematic data is when cliticization occurs
from a genitive complement position, since specifier-head

structure is needed for government. This concerns Toman's 'secondary measure nouns', which are quantifiers, i.e. 'tolik' (so many), 'tak' (so), 'cela/cely' (all f/m). He proposes a rule of reanalysis at LF which will change a syntactic head-complement structure into a specifier-head structure (142). This rule is presented as (52).

(52) Conversion into the Normal Form:

$$X_\alpha \quad Y \quad \text{--->} \quad X \quad Y$$

head modifier   specifier head

(where α denotes the appropriate class of nominal quantifiers)

Toman hopes with this rule to have the position from which cliticization proceeds to be properly governed at the level of Logical Form, but at the same time preserving syntactic properties of these NPs, i.e. agreement, at the syntactic level of representation. Unfortunately he runs into evident counterexamples with cliticization from the genitive position. If these cases are head-complement structures, and the head is the operator in semantic terms such phenomena will be explained. But stacking reanalysis rules to explain a structure, only to have to posit another to account for the discrepancy seems stipulatory. One possible solution would be to analyze this phenomenon in terms of Mallen (1990 and 1992).

The DP Analysis Proposal

Based on his analysis of lexical arguments of Spanish noun
phrases being realized in postnominal position (as 'de'-
phrases), Mallen (1990) proposes a hierarchical distribution
of positions. The configuration of the NP would parallel
that of the VP, with the parallelism also extending to the
nominal functional categories. Thus, a nominal functional
head D (Determiner) corresponds to C (Complementizer), the
sentential functional head, and a nominal functional head
NI(NFL) will correspond to the sentential functional head
I(NFL). Thematic roles would be assigned by NI and the
lexical head N rightward. All nominal heads D, NI and N
would also assign the Genitive Case rightward in Spanish.
Nominal arguments would be base-generated in postnominal
position and receive their T-role at d-structure and Case at
s-structure. Any occurrence of an argument in a prenominal
position would be attributed to a movement operation. Mallen
maintains this movement to be the process of cliticization
(head-to-head movement) to D through the intermediate F-
category NI, paralleling the mechanism of cliticization to I
at the sentential level.

In (53a), D selecting NI and NI selecting N parallels
(53b) where C selects I and I selects V. Lexically, C would
be instantiated by complementizers, I by modals, D by

determiners and NI by quantifiers. The quantifiers so
problematic for Toman's analysis would be under NI in this
approach.The configurations pattern as in (52) and (54)
(1990:4).

(53) (a)
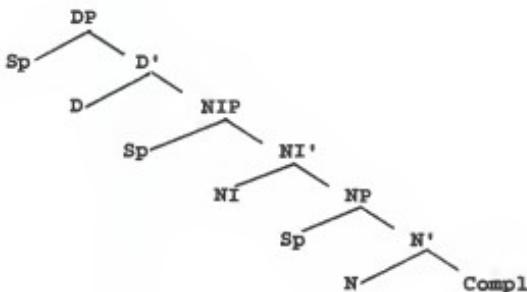
(b)
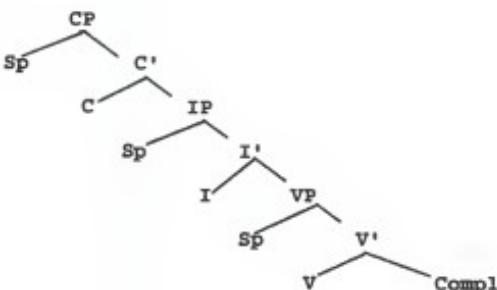
Using Mallen's analysis, the ungrammaticality of
Toman's data would be explained by the Minimality (M-)
barrier NI blocking antecedent government (Mallen 1990:8-9).

(54) X is an M-barrier for Y iff

    (a) X includes an Xmax (not necessarily distinct
        from X) containing Y

    (b) the head of X c-commands a head Z
        c-commanding Y

In analyzing the patterning of Romance clitics and
Toman's Czech examples, L-marking needs to be taken into
consideration. If Romance clitics can attach to V or I
(Mallen 1990:24-25), I is strong enough to L-mark VP in
Italian, but not French. Polish would pattern same as
Italian here. In French, since I is not a possible L-marker,
a clitic can only attach to V. Unless the V node can raise
to I itself, this restriction will apply. This process will
L-mark the VP and allow clitic attachment to I as in (55).

(55) Jean a   promis de bien les   faire

    Jean has promised well to-them do

Otherwise clitics have the scope of V.

Case and Theta Chains

In Chapter 4, the importance of coindexation will be
demonstrated for clitic movement. In Mallen (1992), A'-
binding of an NP-internal element from outside becomes
possible if the element inside the NP is coindexed with a
clitic. The nominal elements in a case chain have to be a

part of the same thematic chain. This accounts for the
patterning in (56) (Mallen 1992:36).

(56) (a) *Me   pareció eficaz [$_{DP}$[$_{NIP}$[$_{NI}$ su$_2$][$_{NP}$ [$_{N'}$
          to-me seemed efficient   its$_{(T)}$

          elaboración pro$_2$] del comité$_3$]]
          elaboration   by-the committee$_{(A)}$

     (b) Me pareció eficaz [$_{DP}$[$_{NIP}$[$_{NI}$ su$_2$][$_{NP}$ pro$_2$]
          to-me seemed efficient   his$_{(A)}$

          [$_{N'}$ elaboración de la propuesta$_3$]]]]
          elaboration of the proposal$_{(T)}$

(56b) is acceptable since the case chain and thematic
chain condition is satisfied. Thus, 'su' is in a case chain
with NI and 'la propuesta' is in a case chain with N. Since
both belong to two different case chains they will also have
two different thematic chains. Agent theta-role and theme
theta-role hold for each chain. Polish patterns the same
way. Since its also inflected for case, its evident that
case chains and theta-role chains follow this pattern. The
interpretation for the following (57) Spanish structure
(Mallen 1992:42) would be the same for Polish (58).

(57) De qué libro   leiste   mi   reseña?
     of what book$_{(T)}$ you-read my$_{(A)}$ review

(58) Której książki przeczytałeś mą   recenzję?
     of what book$_{(T)}$ (you) read my$_{(A)}$ review

ECP and Government

This approach to analyzing clitics is echoed in Culicover's discussion of analyzing ECP only under a conjunctive definition of the ECP and with a DP analysis of the noun phrase. He explains that ne-cliticization in Italian and en-cliticization in French do not falsify the claim of adjuncts being unextractable from NP. The clitic is analyzed by Culicover as either an argument of N or the head of NP. Here, ungrammaticality would result as a failure of head government, not antecedent government since DP would be L-marked by V. There would be no failure of antecedent government since the trace of the adjunct will always be antecedent governed. If ECP is to be used as a solution, then that solution must come under the failure of head government as defined by Rizzi (1990). Rizzi (6) defines the two types of government as fully parallel, with the difference being in the characterization of the classes of governors. Head governors are the lexical heads as well as some functional heads (i.e. those containing agreement and tense specification), with the assumption that Agr and T can be heads of independent projections and can be associated as features with other heads. Antecedent governors are comprised of coindexed categories. XP's not directly

selected by [+V] elements are "inviolable barriers for government" (6).

(59) Head Government: X head-governs Y iff

(i) X ∈ {A, N, P, V, Agr, T}

(ii) X m-commands Y

(iii) no barrier intervenes

(iv) Relativized Minimality is respected

(60) Antecedent Government: X antecedent governs Y iff

(i) X and Y are coindexed

(ii) X c-commands Y

(iii) no barrier intervenes

(iv) Relativized Minimality is respected

Relativized Minimality is defined by Rizzi (1990:7) as the variable notion " α-government," which ranges over head government and antecedent government.

(61) Relativized Minimality: X α-governs Y only if there is no Z such that

(i) Z is a typical potential α-governor for Y,

(ii) Z c-commands Y and does not c-command X

Relativized Minimality would allow antecedent government in (62) (Rizzi 1990:9)

(62) How do you think [t' that [Bill solved it t"]]

The subject (A specifier as well as V, I, and C intervene between t' and t" and 'how' and t". They do not interfere with antecedent government. Instead of analyzing

the data as nullifying V^0 intervention by not projecting a
V' level or positing the I system as intrinsically defective
(i.e. its projections never count as inherent or minimality
barriers) or 'that' deletion at LF, Rizzi proposes that
different kinds of government do not interfere with each
other. Therefore, in (62) the A'-chain is the relevant
relation, and under relativized minimality the intervening
heads and A specifiers do not have any blocking power. This
would also hold for the antecedent-government relation
between 'how' and t', since intervening heads and A
specifiers will never interfere with A'-chains in terms of
antecedent government. Chapter 4 will continue the analysis
of coindexation and chain relations.

PPA's and SPA's

Kipka's Polish inflection analysis to explain
impersonals is ingeniously elegant also for explaining Aux.
clitic attachment, given his morphemic division for Tense,
Gender and Number affix in [+past] and Person, Number affix
for [-past].

The phenomena I call Agr. clitics have been called
verbal desinences by Decaux and Andersen, among others.
Kipka calls them affixes in his acronyms, but the dynamics
are the same: they attach to V's, N's, Adj's, Adv's, Conj.
(anything that appears in a CP, through base generation or

wh-movement) and misbehave phonologically, although this
behavior is contingent on whether there is movement
(raising) or not.

Kipka assumes the following tenses (142):

(63)   czytać   'to read'

Past Imperfective: czytaliśmy   'we were reading'

Past Perfective: przeczytaliśmy   'we read'

Present: czytamy   'we are reading'

Future Perfective: przeczytamy   'we will read'

Future Imperfective: będziemy czytali 'we will read'

                     będziemy czytać   'we will read'

(64) czyt a - l   i   - ś   my
     root V   Past number   Past person
                      gender   number

                                      PPA
                               (past person affix)

     czyt a -   my
     root V (thematic) person
                         number

                         SPA
                  (simple person affix)

In (64) above Kipka's morphemic division into PPA and
SPA explains how movement proceeds through the tree
structure, and why raising is the only option available for
AGR clitics. Kipka posits a Past tense specification as a
prerequisite to movement as in (65).

    (65) (a) Kupiliśmy   lustro.

                  buy-Past.1.pl.m.   mirror-ACC

        (b) Lustro kupiliśmy.

        (c) Lustrośmy kupili.

        (d) *Kupili lustrośmy. (no lowering possible)

        (e) My kupiliśmy lustro.

            we

        (f) Myśmy kupili lustro.

    (66) (a) Wie   że   kupiliśmy lustro.

             know-Pres.3.sg that

             'He knows that we bought a mirror'

        (b) Wie że lustro kupiliśmy.

        (c) Wie że lustrośmy kupili.

        (d) Wie żeśmy lustro kupili.

I will ignore Kipka's choice of labeling this desinence
as 'affix' (it does not attach only to morphemes, it has
freedom of movement, which a technical affix does not).

Analyzing (65) and (66) this left only floatation is
posited by Kipka as available to Past tense only, therefore

PPA's. He generates subjects in the [Spec,VP], they then
move to [Spec,AGRP] and then to [Spec,IP] where they acquire
Nominative case. Kipka's examples are mostly pro, and he
explains that they will be detectable from agreement
phenomena. Theta marking will occur within the maximal
projection of a relevant head if subjects are generated VP-
internal. Person agreement takes place only between AGR and
its Spec, number and gender by Spec-Head agreement. There is
only one AGR node per clause so that no clause contains two
PPA's, two SPA's or one of each. Analyzing (67) Kipka's
process could also work in Pollock's (1989) AGR_S and AGR_O
model. For Polish, where there's only one subject agreement,
AGR_S would be the recipient of the movement, the process
making the AGR_O 'inactive', or leaving [Spec,TP] as a
possible landing site.

Thus the [-past] 'czytamy książkę' "we are reading a
book" would have the following structure (144).

(67)
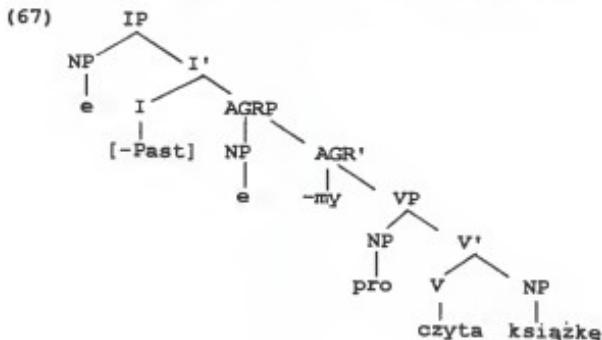
The verb stem and its two arguments start out VP-internal. The verb stem moves to AGR' (an SPA) and then into I. The subject 'pro' (1pl) moves to [Spec,AGRP], triggers person agreement and then moves to [Spec,IP] to get case. For [+past] PPA of the type 'Zostaliśmy pobici' "We were beaten", Kipka assumes the PPA -smy to be in AGR and the auxiliary and the main verbs to be heading VP's. Then, the argument (pro) moves from object position to [Spec,VP] of each VP, then [Spec,AGRP] then[Spec,IP]. The auxiliary then moves up to the PPA under AGR, and the affixed verb moves to [+past] I. Minimality will keep the passive participle in situ. Tense checking in Kipka's model has PPA's, verbal '1'-forms (i.e. 'czytali') and passive endings marked [+Past] Anything moving into [+Past] must have all constituents [+Past]. Anything moving into [-Past] (present, future) has to have all constituents marked [-Past]. Thus PPA's will only accept '1'-form stems, while SPA's accept only non-'1'-form stems (bare roots). Minimality will prevent passive participles from adjoining to PPA's or SPA's. Since there is movement, feature copying or similar mechanism is ruled out. This would contradict Klavans's copying approach to clitics.

The reflective 'się' also obeys attachment rules, not only for pro-clisis or en-clisis, but for ordering of attachment. It will follow verbal clitics and the

conditional 'by', and only attach to [Spec,CP] if there is
an overt subject. Thus we have the following:

    (68) (a) Basia bawi   się na dworze.

                Basia play-PRES3Sg   REFL on-outside-LOC

                'Basia is playing outside'

        (b) Basia się bawi   na dworze.

                Basia REFL play-PRES3Sg on-outside-LOC

        (c) Basia się na dworze bawi.

                Basia REFL on-outside-LOC play-PRES3Sg

        (d) *Się Basia bawi   na dworze.

                 REFL Basia play-PRES3Sg on-outside-LOC

        (d) *Basia bawi   na dworze   się.

                Basia play-PRES3Sg on-outside-LOC REFL

In (69) and (70), any movement would honor the hierarchy
of attachment.

    (69) (a) My   bawili=śmy   się na dworze.

                we-NOM play-PASTm1Pl REFL on-outside-LOC

                'We were playing outside'

        (b) My=śmy bawili   się na dworze.

                weCl1Pl play-PASTm1Pl REFL on-outside-LOC

        (c) My=śmy się bawili   na dworze.

                weCl1Pl REFL play-PASTm1Pl on-outside-LOC

(70) (a) My   bawili=by=śmy   się na dworze.

         we-NOM play-PASTClCondm1Pl REFL on-outside

         'we would have played outside'

     (b) My=śmy bawili=by   się na dworze.

         weCl1Pl play-PASTmPlClCond REFL on-outside

     (c) My=by=śmy   bawili   się na dworze.

         weClCondCl1Pl play-PASTmPl REFL on-outside

     (d) My=by=śmy   się bawili   na dworze.

         weClCondCl1Pl REFL play-PASTmPl on-outside

     (e) *My=śmy się bawili=by   na dworze.

         weCl1Pl REFL play-PASTmPlClCond on-outside

In Kipka's analysis of the Polish Impersonals, the
present tense Reflexive Impersonals have third person
singular morphology. In [-present] (past and future) the
Reflexive Impersonals display third singular neuter
morphology (135-137).

     (71) (a) Je   się cebule.

         eat-PRES3Sg REFL onions-ACC

         'One eats onions'

     (b) Jadło   się cebule.

         eat-PAST3Sgn REFL onions-ACC

         'One/we ate onions'

     (c) Będzie się jadło cebule.

         be-FUT3Sg REFL eat-3Sgn onions-ACC

         'One/we will eat onions'

What Kipka does note about gender inflection in his
analyses is that third person singular neuter morphology
appears to be a default option (139). Thus impersonal forms
of verbs such as 'iść' "to go" will pattern in the following
way.

(72) (a) O co   (ci)   chodziło?
         about what (you-DAT) go-PAST3Sgn
         'What did you mean?'

     (b) Jak (ci)   idzie?
         how (you-DAT) go-PRES3Sg
         'How are things going for you?'

Quantifier NP's

Default inflection is also induced by certain quantified
NP's:

(73) (a) Nad tym pracowała   jedna   studentka.
         on that work-PAST3Sgf one-NOMf student-NOMSgf
         'One student worked on that'

     (b) Nad tym pracowały   dwie studentki.
                 work-PAST3Plf two student-NOMPlf

     (c) Nad tym pracowały trzy studentki.
                           three

     (d) Nad tym pracowały cztery studentki.
                           four

From number five (inclusive) on, the case of the NP is genitive and the verb defaults to neuter gender inflection.

(74) Nad tym pracowało   pięć studentek.

    work-PAST3SGn five student-GENPlf

Kipka assumes the default agreement occurs along the lines of QP's not bearing person, number or gender features. Toman (1986:144) posits the genitive case as invariable for an adnominal complement (head-complement) structure. The head is an operator in semantic terms and makes cliticization from genitive position possible in Czech (75) with the same holding for Polish (76).

(75) (a) V Paříži mají celá muzea takových

        in Paris they-have whole museums of-such

        soch.

        statues

    (b) Mají jich$_i$ v Paříži celá muzea [e$_i$]

        they-have of them in Paris whole museums

    (c) [Takových soch]$_i$ mají v Paříži celá muzea [e$_i$]

        of-such-sculptures they-have in Paris whole

        museums

(76) (a) W Paryżu mają całe muzea takich rzeźb.

        in Paris have-PRES3Pl whole museums of-such

        statues-GEN

    (b) Mają ich$_i$ w Paryżu całe muzea [e$_i$]

        have-PRES3Pl of-them in Paris whole museums

(c) [Takich rzeźb]$_i$ mają w Paryżu całe muzea [e$_i$]

　　　 of-such sculptures have-PRES3Pl in Paris whole
　　　 museums

The NP 'muzea' (a container noun) has to be changed by
'celý/cały' for Czech and Polish respectively into a measure
noun. Only then cliticization will be possible. This is
where Toman proposed his head-modifier into specifier-head
conversion. He proposes treating the cliticization by re-
analysis, but treating this mismatch between syntactic
structure and the syntax of logical form in such terms is
not the only possible solution.

Inherent vs. Imposed Features

Zwicky (1986) in the format of GPSG formulates a
structure which would differentiate between imposed and
inherent feature specifications INH and IMP, respectively.
Imposed would deal with rules imposed by either government
or agreement, inherent specifications would not. Zwicky
argues for a multiple feature marking, and the need for
specifications imposed by agreement on a constituent to be
distinguished according to the types of triggering
mechanisms that impose them. This multiple feature marking
would imply that the AGR have INH and IMP features. The
approach again is taxonomic, with Zwicky citing PR (i.e.

possessor) and PD (possessed) structures to support the claims. He analyzes the German direct object NP 'seine Mutter' "his mother" in such a way (86). The base 'sein' would pattern in the following way.

(77) CASE:GEN GEND:MASC NUMB:SG

CASE:NOM GEND:MASC NUMB:SG for '-er'

CASE:GEN GEND:FEM NUM:SG for 'ihr'

CASE:GEN GEND:MASC NUM:PL for 'ihr'

In order to predict inflectional material and to distinguish inherent specifications of a PR (possessor) noun from the specifications it bears by agreement with PD (possessed) the following full form needs to be represented.

(78) CASE:ACC GEND:FEM NUM:SG

In formalizing his proposal, Zwicky turns to the approach that categories themselves, i.e. sets, can be viewed as potential members of categories. This would allow the categories to be layered. Deep layering would then distinguish different arguments of a verb according to the layers they would occupy. AGR would be viewed as a subset instead of a category-valued feature (95). It is interesting to note that in some of his representations, Zwicky acknowledges the split of gender, number, and case in AGR, but does not formally represent it in any way. The resulting system of rules might appear to work (though very stipulatorily and taxonomically) for some CNW (cardinal

numeral words) but the list of features necessary to specify all the needed conditions and contingencies becomes unwieldingly long and complicated, with problems branching out into an if/then type of solutions. Likewise in his treatment of clitics Zwicky (1977) did not attempt a unified characterization of cliticization.

AGR Features

Many contemporary approaches to forming a theory of clitics have looked in the direction of the AGR Phrase. Whether the approach is morphologically based, as exemplified by Halpern, or heavily dependent on phonological rules, as in Aguado and Dogil (i.e. phonological rules must have access to representations whether they are derived or not), or morphologically and phonologically parametrized as in Klavans, AGRP appears to be the direction in which the analyses are heading. Klavans's differentiation of lexical clitics and phrasal clitics, the latter being defined syntactically, suggests treating clitics in that category as agreement markers, which appears to be the right direction in attempting to deal with Polish verbal inflection clitics. Booij and Rubach's division into two clitics, lexical and syntactic, appears stipulatory. By positing separate gender, number, person nodes in AGRP, the dichotomy of stipulating

lexical clitics with a surface filter and syntactic clitics
would be avoided. What needs to be addressed is the role of
the gender, number and person features, especially gender,
since the presence of this feature impacts on the
possibility of clitic movement in Polish, while its absence
rules out structures which many contemporary approaches have
not been able to uniformly explain. The positing of separate
nodes is not an ad hoc stipulation. Chapter 3 will show
that, historically, person, number, and gender markings had
started out as separate entities, realized in various ways
as verbs, auxiliaries and desinences.

CHAPTER 3

THE POLISH VERB PARADIGM IN HISTORICAL PERSPECTIVE

According to Decaux (1955), the appearance of an overt
person-specified pronominal and then subsequent attachment
of the corresponding aux desinence to the V, started around
the 15-16th century, and resulted in the evolution of the
present verb paradigms in Polish. Historically, the
desinences (Infl. clitics, Agr. clitics) follow the
development of BE, the Polish copula and verb of existence.

The Polish Copula 'Być'

Andersen (1987) follows Decaux's analysis of the gradual
development of 'być' enclitic forms in Polish (fixed
desinence) from an autonomous word. In Common Slavic the
verb "być" functioned as an auxiliary (Anderson:23-25,
Decaux:114-118, 127). Old Polish had two forms of 'być', an
orthotonic form and a phonologically reduced, enclitic form
in unmarked position.

(79) Old Polish   orthotonic   enclitic   Modern Polish

1Sg	jeśm	-(e)śm/-(e)m	-(e)m
2Sg	jeś	-(e)ś	-(e)ś
3Sg	jest	-0	-0
	jeść/je		
1Pl	jesm(y)	-(e)smy	-(e)śmy
2Pl	jeśće	-(e)śće	-(e)ście
3Pl	są	-0	-0
1Dual	jeswa	-(e)swa	
2Dual	jesta	-(e)sta	
3Dual	jesta	-(e)sta/-0	

The copula 3rd person zero form becomes evident around
the 1300's and continues from there on. The full orthotonic
forms of 'jest', 'jesta', and 'są' take on the function of
emphatic predicators, continuing this process through the
1500's.

Reduction of Old Polish Preterite Form

The role of the copula in the Old Polish tense system
was as a part of compound past tense form. After recasting,
the original present tense form of 'być' "to be" did not
have a corresponding past tense form with person marking.
The preterite tense forms underwent a reduction with the
compound tense forms subsuming the imperfect and aorist

function, in which 'być' figured as auxiliary. This resulted
in Old Polish having only two compound past tenses, the
perfect (i.e. preterite) and the pluperfect. The latter,
though still present in some dialects, has declined from the
1700's, and is now more or less defunct (Andersen:17). This
also means that the present tense of 'być' had no opposing
past tense form with person marking. Since 'być' functioned
as an auxiliary in Common Slavic, with a resultative
participle in the -l form of verbs, subject agreement only
in gender and number was shown by the participle
(Andersen:25). Thus, the original present tense form of
'być' becomes reinterpreted as person and (redundantly)
number marker, making the l-participle a finite non-present
form, the preterite. The person and number marker,
therefore, was separate from the gender (and number) markers
shown by the desinences of the l-forms. The presence of l-
forms in the period between 1400-1600's resulted in regular
omission of the 3rd person markers, the singular 'jest'
being the first to go, followed by the plural 'sa' and the
dual 'jesta'. The pattern of omission occurred earlier for
following l-form verbs: 'był' "was", 'miał' "had", 'mógł'
"could", 'chciał' "wanted", and 'kazał' "said"
(Andersen:28). In the post 16th century paradigm there are
no 3rd person markers in either singular or plural in the
preterite or the pluperfect (Decaux:127).

(80)   Common Slavic   Polish

		pre-16th c	post 16th c	present
Sing 1P	jesmĭ	jesm	-(e)m	-(e)m
Sing 2P	jesi	jeś	-(e)ś	-(e)ś
Sing 3P	jestĭ, jestŭ	jest(jesc, je)	0	0
Dual 1P	jesvě	jeswa	-(e)swa	dial.-(e)zwa
Dual 2P	jesta	jesta	-(e)sta	dial.-(e)śta
Dual 3P	jeste	jesta	-(e)sta/0	0
Pl. 1P	jesmŭ	jesmy	-(e)smy	-(e)śmy
		(jesm)	-(e)m	dial.-(e)m
Pl. 2P	jeste	jescie	-(e)ście	-(e)ście
Pl. 3P	sǫtĭ, sǫtŭ	sǫ	0	0

   For 1st and 2nd person markers, the orthotonic full
forms start disappearing around the 16th century. Emphatic
predication proceeds initially by the presence of the 3rd
person markers 'jest' and 'sǫ', whereas in unmarked
predication the markers would be absent. The process of
reduction, therefore, followed from the initial full forms
to a combination of an emphatic predicator (i.e. person
marker) and enclitic person and number marker, to finally
enclitic markers by themselves. Morphologically, the aux
forms were reduced by dropping the initial 'je-' after
vowels, with 'je' becoming 'e-' after consonants.
Furthermore, a nominative personal pronoun justified

omitting person and number markers (81c), as did the
presence of two or more conjoined verbs (81d).

(81) Old Polish Preterite

a. Wiem   że stworzyciela wszego luda

(I) know that creator   of-all mankind

porodziła jeś

bore-Sgf 2Sg

'I know you bore the creator of all mankind'

b. To-m   jest   oglądała

that-1Sg emph"be" saw-Sgf

'That i did see'

c. Jest ja ciebie zepchnął albo uczynił-em tobie

emph I thee   repulsed or did-1Sgm thee

co złego?

any harm

'Did I repulse thee or did thee any harm?'

d. Ani-ś   mie zepchnął, ani rzucił, ani-ś

not-2Sg me repulsed nor deserted nor-2Sg

niektóre złości uczynił

any   harm   did-Sgm

'Thou neither repulsedst, nor desertedst me, nor
didst me any harm'

e. Bo-cie-m   się cała   darowała

for-thee-1Sg REFL entire-f gave-Sgf

'For I gave myself wholly to thee'

Modern Polish Status of 'być'

Though Old Polish raised the '-em' form to N or a
pronominal, in Modern Polish such a construction with the
plural form would be marked (Decaux:24).

(82) a. Ja jestem > jam   jest

    I be-1Sg   I-1Sg be3Sg

   b. my jesteśmy > myśmy jest

    we be-1Pl   we-1Pl be3Sg

The markedness would arise out of the orthotonic
function of 'byc', which would take the default 3rd person,
but take the 'jest' or 'sa' depending on the number marking.
Thus, even towards the end of the 15th century (83) would
not be prevalent, even though 'jestem' was widely attested
since 1439 (Decaux:24).

(83) poslanem   jest

    sent-PASS-1Sg be-3Sg

The original 3rd person forms took on the role of
unspecified-person predicators, and continued as verb of
existence and copula in modern Polish. For 1st and 2nd
person, Old Polish used the forms with enclitic person and
number markers. The orthotonic copula (84a) remained current
until the early 16th century. In (84b) the form 'jest' is a
predicator and in (84c) it functions as an emphatic copula
with a person and number marking. The pronominal assistance

for person and number marker alone is shown in (84d), while
(84e) is an example of a person and number marker appearing
alone (Andersen:37).

(84) a. Ty   jeś uliczka rajska

'thou art road   to paradise

b. Ty, jen- że-ś jest przez początku...

thou who -2Sg emph since beginning

'Thou, who hast been since beginning...'

c. Bo ja jest-em Maria

for I emph-1Sg Mary

'For I am Mary'

d. Bo-m   ja pan Bóg wasz

for-1Sg I Lord God your

'For I am the Lord, your God'

e. Ale my, co-śmy?

but we   what-1Pl

'But we, what are we?'

This transition can also be seen in (85) based on Decaux
(114).

(85) spaż jesm > ja jesm spaż > jam spaż > spażem

The pronominal/clitic construction with the -1
form is still evident in some regional dialects, with the
southern regions (i.e. Cracow) accepting it as dialectal
variation, as opposed to the northern (i.e. Warsaw) regions,
which view this structure as archaic (Andersen:30).

The Conditional 'by'

The conditional clitic 'by' in Polish is generated
phrase final, and can raise to second position a la
Wackernagel into CP, providing there is a conjunction
present. Historical data show this progression. In Polish
law books of 1450, the following constructions appear
(Decaux:25).

(86) gdy taki   listy   albo zapisów
     if   such-Sgm letter-ACCPlm or   record-GENPlm

     twardości   miał=by
     hardship-GENPlf have3SgCondCl

     gdy=by taki......
     ifCondCl suchSgm...

     'If such a person would have letters or records of
     hardships'

The 'by' takes on the scope over CP by attaching to
'gdy'.

(87) Gdy=by   taki......

     ifCondCl suchSgm...

Following Decaux's (145) and Andersen's (35) analyses,
the conditional developed first as a stem 'by-' plus
desinences in Old Polish, reanalyzed in modern Polish as
enclitic '-by' + enclitic number/person markers (my AGR
clitics). This historical development accounts for the
ordering of clitic clusters with the conditional preceding
the person/number enclitics.

(88)	Common Slavic	Old Polish	Modern Polish
1st Sg.	byxŭ	bych	by-m
2nd Sg.	by	by	by-ś
3rd Sg.	by	by	by
1st Pl.	byxomŭ	bychom, bychmy	by-śmy
2nd Pl.	byste	byście	by-ście
3rd Pl.	byšę	bychą	by
1st Du.	byxověˇ	bychowa, bychwa	dial. byźwa
2nd Du.	bysta	bysta	dial. byśta
3rd Du.	byste	bysta	by

The dialectal dual form is equal to syntactically pluralizing a semantically singular person while keeping the style informal. Some dialects preserve this, otherwise this function has been subsumed by 2nd person plural, used as a polite form for a singular, i.e. -eście.

The preterite forms and the conditional forms had corresponding diverse forms at the crucial transition stage during the 16th century. The paradigm of development of verb and conditional endings is from Decaux (154).

The residue of the '-ch' forms is evident in some dialects, i.e. Dobrzyń, Warmia and Podhale, but not Mazowsze (the northern parts), following the pattern of more archaic tendencies of the southern dialects.

(89)	Preterite	Conditional
1st Sg.	-(e)m	bym
	-(e)ch	bych
	0 (+ ja)	by (+ ja)
1st Du.	-(e)swa, -(e)źwa	byswa, byźwa
	-(e)chwa	bychwa
	-(e)śma	byśma
	(0 + wa)	(by + wa)
1st Pl.	-(e)smy, -(e)śmy	bysmy, byśmy
	-(e)chmy	bychmy
	-(e)m	bym
	0 (+ my)	by (+ my)
2nd Sg.	-(e)ś	byś
2nd Du.	-(e)sta, -(e)śta	bysta, byśta
2nd Pl.	-(e)ście	byście
3rd all	0	by

In the 16th century the 'bym' form replaced the 'bych'
both singular and plural:

(90) staralichmy się, abym   listy   swe

    try-PAST1Plm REFL to-CondCl letter-ACCP1m ownCl

    przesłać mogli

    send   can-PAST3Pl

    'We tried, so that we could send our letters'

As the pronominal became introduced, it carried the
person marking, transferring the marking then to the verb,

with the 'be' verb inflection becoming an aux-clitic. Thus,
the preterite and the conditional forms of Polish
auxiliaries were reduced to a single form in the 16th
century, with the conditional having the same form as the
preterite, but augmented by 'by'. Decaux (126) calls this
the conditional particle. The preterite in Polish patterns
after the enclitic form of the verb 'być' "to be" as in
(80).

The conditional attaches to the aux-clitic, but
according to Decaux, there is no stress shift with the
conditional.

(91) Ja 'robił

    I do-PAST1Sgm

    Ja by 'robił

    I CondCl do-PAST3Sg

    'Robiłbym

    do-PAST3SgmCondCl1Sg

    Ja ro'biłem

    I do-PAST3Sg

    Ja bym 'robił

    I CondCl1Sg do-PAST3Sgm

This is in contrast with AGR clitics changing
penultimate stress on an -l stem verb only, and
person/number clitics (my AGR clitics) affecting voicing of

stem final obstruents, discussed below in the section on
phonological considerations.

In embedded conditionals, 'by' attaches to Comp. If Comp
is null, then 'by' will follow the first constituent
(Decaux:120).

With [-tense]:

(92) Żeby   nie być gołosłownym,   dam   konkretny
     soCondCl neg be 'empty-worded'   give-FUT1Sg specific
     przykład.
     example-ACCSgm
     'So as not to speak in vain, I will give a specific
     example'

In passive participle constructions:

(93) A cóżeś   chciał?
     and whatInsisClAGRCl2Sg want-PAST3Sgm
     'And what (insistence) did you want?'
     żeby   ich   uczono   filozofii
     soCondCl they-GENPl teach-PASSn philosophy
     'that they be taught philosophy'
     i odciągano od konfesjonałów?
     and pull-away-PASSn from confessionals-GENPlm
     'and be pulled away from confessionals?'

In example (93), the clitic is in second position,
attaching to [+wh] in Comp.

With predicate adjectives, 'by' clitics also attach as
second to a leftmost constituent, i.e. Adj, or conj.

(94) Rådbyś   potem,   aby   się

happyCondClAGRC12Sg after soCondCl REFL

tåncem   zabawiała.

dance-INSTRSg entertain-PAST3Sgf

'Happy you would be later, if she would entertain
herself with dancing'

The clitic position constraints have not changed, even
though this example is from 1614. The reflexive's position,
though, in modern Polish would require adjacency to the verb
either pro- or en-clisis. Other positionings would make
grammaticality judgements dependent on dialectal parameters
(cf. (44), (45), (68) and Aguado and Dogil:108).

Clitic of Insistence 'że'

Decaux posits an enclitic 'że' which he calls a mark of
insistence, while Szober calls it epideictic and
augmentative for demonstrative pronouns (134). In respect to
AGR clitics, the clitic 'że' is proclitic. In example (89)
above, Decaux posits 'że' followed by '-eś' and analyzes it
as 'że-ś', with the insistence clitic/preterite clitic
cluster comprising of 'że-' + preterite desinence with the
optional (-e) not present.

Looking at the 'że' examples below, from the 16th
century to the present, the paradigm is quite stable, with
phonological variations fitting Decaux's specifications
(205-206).

> (95) From 1564:
>
>> Jesli=że kto z księątwa którego o to się na mię
>> gniewać będzie...
>>
>> 'If, from which kingdom someone will be angry at me
>> for this'
>>
>> From 1594:
>>
>> A jeśli=ż u inszych najdujemy...
>>
>> 'And if then we find that with others'
>>
>> From 1597:
>>
>> [...] Zapraw=że was Pan Bóg w wielką miłość ku
>> braciey waszey
>>
>> 'Indeed, the Lord God in great love towards your
>> brethren'
>>
>> From 1890:
>>
>> jak=że się miewa i jako=ż mu się powodzi?
>>
>> 'How then is one, and how then are things'
>
> (96) From 1994:
>
>> a. Szybko=że=śmy   wróciły.
>>
>> fastInsisClAgrCl1Pl return-PAST3Plf
>>
>> 'How fast we returned'

b. Szybko=śmy   wróciży.

    fastAGRC11Pl   return-PAST3Plf

    'We returned fast'

In respect to elements in Comp, the clitic 'że' is an
enclitic (95), with a simultaneous proclitic function if the
preterite AGR clitics also attach to the cluster (96a). In
Pachowicz, 'że' as proclitic to 'by' is attested as late as
1803 (192).

Coordinate and Subordinate Verbal Constructions

The analysis of coordinate verbal constructions in
Polish dating from 1398 to the beginning of the 20th century
presents the phenomena of inflectional clitics, the
reflexive clitic and the conditional clitic being present on
the first verb in the series, and being omitted on the
subsequent ones.

(97) tako mi   Bóg pomoży   i   swieci,   eż

    so   me-DAT god help-PRES3Sg and bless-PRES3Sg that

    byż=esm   przy tem i   widziaż=0

    be-PASTmCl1Sg with-it and see-PASTSgm

    'so help me God and bless me, that I was there and

    I saw (it)'

```
(98) Doznali=śmy,          ach, doznali=0
     experience-PAST3PlmCllPl oh experience-PAST3Plm
     tego
     this-GEN
     'We experienced this, oh, we did (experience)'
```

```
(99) zgrzeszyła=ś          i   niezgrzeszyła=0
     (you) sin-PASTSgfCl2Sg and not-sin-PASTSgf
     'you sinned, and you didn't sin'
```

The omission of person and number AGR clitics on verbs
in coordinate structures, dated 1398 for (97) and 1652 for
(98) is still evident in 1880 for (100) (Decaux:30-31). In
this example, there are two verbs, in a series of three,
which have 0 AGR clitics, with the first verb carrying the
person and number clitic.

```
(100) Odtąd     nie czuli=śmy,     nie widzieli=0
      since then NEG feel-PASTPlm=1Pl NEG see-PASTPlm
      i   nie myśleli=0
      and NEG think-PASTPlm
      'Since then, we did not feel, see, or think'
```

In coordinate constructions 'się' originally patterned
overtly on the first verb and was lacking on subsequent
ones:

(101) Kompania   rozrzuca   się w

       company-NOMSgf scatter-PRES3Sg REFL into

       plutony,   rozwija   w   drużyny...

       platoon-ACCPlm expand-PRES3Sg into squad-ACCPlf

       'the company scatters itself into platoons,

       expands itself into squads...'

The implications arising from this analysis suggest a
different theta role assignment of verbs in Old Polish. The
verb 'rozwijać się' requires a patient theta role to be
assigned. Without the reflexive, Modern Polish specifies a
patient theta role in addition to the agentive function.
Omission of the reflexive in Modern Polish results in *
constructions. Since the data from Decaux was acceptable in
Old Polish constructions, any further analysis in this
direction will have to deal with that question.

   The 'by' conditional clitic also follows this
coordinate attachment pattern:

(102) wolał-by   ja wolał-0

      prefer-PASTSgm=CondCl I prefer-PASTSgm

      "I would prefer, I would'

When the data has an orthotonic verb of existence, there
is no omission (examples from ca. 1400, based on Decaux:32).

(103) Ja jesm spaŁ i naspaŁ

  I be-PRES1Sg sleep-PASTSgm and sleep-PAST-PerfSgm

  jesm się

  be-PRES1Sg REFL

  'I slept and am rested'

(104) i wiesielili jesmy się i

  and rejoice-PASTP1m be-PRES1P1 REFL and

  kochali jesmy się we wszech dnioch

  love-PASTP1m be-PRES1PL REFL in all day-P1

  naszych

  our

  'and we rejoiced and loved each other in all our

  days'

The subordinate verb constructions pattern as in (102).

(105) więcej czytali=śmy utwory niż

  more read-PASTSgmCl1P1 work-ACCP1m than

  studiowali=0 tekst podręcznika

  study-PASTP1m text-ACCm school-book-GENSgm

  'we read the works more than we studied the text

  of the school-book'

The orthonic form of 'być' together with the -1 forms of
the verbs would have the gender and person features realized
separately. Only when the AGR clitics are able to attach to
the -1 stems, after the verb+desinence+aux >
verb+pronominal+aux [aux > 0] progression are they able to

move, being recoverable in their representations. Since historically the desinences started out separately, the proposal for their syntactically separate treatment follows logically.

CHAPTER 4

AGR PHRASE PROPOSAL

The different approaches to clitic movement analyzed in Chapter 2 have shown that the answer to the problem of positing a verbal clitic movement theory lies in a closer scrutiny of the AGR Phrase structure. Polish data in Chapter 3 present verb paradigms in Old Polish in which there is a hierarchy of clitic attachment. If this hierarchy exists, and data cited by Decaux, Anderson, Pachowicz, Szober, Zwicky, Booij and Rubach, Aguado and Dogil show that it does, then there has to be a preset, specified structure that reflects this hierarchy. The Dative pronominal-REFL construction has been attested in Decaux, Andersen, Aguado and Dogil, and Szober. Aguado and Dogil specify an ordering of case clitics and 'floating clitics' (my AGR clitics). The AGR clitics follow case endings:

(106) Jankow=i=m

      John=DAT=1sg

Szober posits a structure in which pronominal clitics inflected in the Dative precede the REFL.

(107) Jak=że   ci   się   spało?

      how-InsisCl you-ClDAT REFL sleep-3Sgn(impersonal)

This ordering in a syntactic tree structure would
account for the assignment of functions, i.e. case and theta
roles.

Borsley, in analyzing wh-movement and Polish equatives,
notices that 'jak' "how" can move if it is inflected for
case (279-280).

(108) a. Z jakim przystojnym mężczyzną rozmawiała Anna?

    with how handsome   man   talked   Ann

    b. Z jakim Anna rozmawiała przystojnym mężczyzną?

(109) a. Z jak przystojnym mężczyzną rozmawiała Anna?

    b. *Z jak Anna rozmawiała przystojnym mężczyzną?

In (108a) 'jak' carries Instrumental case inflection,
contrasted with (109a) where 'jak' is not inflected,
resulting in a * construction.

Cichocki, in his Comp analysis, posits the presence of a
wh+complementizer as a * construction, with wh+relative as
an acceptable one (61-62). In (62), Cichocki assigns 'że' as
a relativizer, even though it is an emphatic marker. The
ungrammaticality could also be analyzed as a failure of co-
indexation, using a theta and case chain approach.

(110) a. *Widział=em   chłopca$_i$ [że   któr=emu$_i$

    (I) see-PAST1Sgm boy-ACCSg   that who-DATm

    [kupił=eś   książkę]]

    (you) buy-PAST2Sgm book-ACCSgf

b. Widziałem   chłopca [któremu   że=ś

(I) see-PAST1Sgm boy-ACCSg who-DATm that=2Sg

[kupił książkę]]

buy-Sgm book-ACCSgf

Zwicky (1986) tries to fit the structure containing AGR
features into a General Phrase Structure Grammar model, but
that results in a cumbersome, taxonomic, ad hoc model, which
cannot account for verbal clitic movement in Polish data
(1986:86-96). Booij and Rubach's analyses run into problems
with case assignment and floating clitics, creating a
paradox in their theory. A possible solution of a post-
lexical checking mechanism, first suggested by Aguado and
Dogil, is an ad hoc assumption. The only justification for a
filter of this sort is the presence of a structure which
cannot otherwise be accounted for, and which will not stop
*structures from being generated. It would be much more
elegant to posit a system of generating only grammatical
structures, and defining the environment for their
generation, instead of overgenerating, producing
ungrammatical structures, and then positing stipulatory
mechanisms to rule them out. Booij and Rubach's attempt to
keep cliticization within the theory of Lexical Phonology
cannot be maintained, in view of Polish pronominal clitics
and the impossibility of their attachment within a major
constituent (Cichocki:56-57, Aguado and Dogil:108).

Nevertheless, Aguado and Dogil's solution to this problem,
i.e. applying phonological rules to either lexically or
syntactically derived representations, cannot account for
all clitics. They still have to stipulate the 'by' clitic
attachment to the inflectional clitics in the lexicon as a
set of inflected (double) clitic forms.

(111) 1 Sing   -by=m

      1 Pl   -by=śmy

      2 Sing   -by=ś

      2 PL   -by=ście

      3 Sing   -by

      3 Pl   -by

Aguado and Dogil's attempt at a solution to the problem
of 'by' results in postulating morphological word-formation
rules requiring strong syntactic conditions, such as
selecting the position of an affix in the embedded clause by
the main verb. This analysis is abandoned by the authors
since 'such "rules" would add unlimited power to the
morphological component' (107), and still filters would be
needed to eliminate improperly assigned clitics. Aguado and
Dogil leave the question of 'by' unanswered. They also fail
to take into consideration the historical progression of the
'by' paradigm, which inflected parallel to the orthonic
'być' forms, but which after enclisis of 'być' in post-16th

century Polish formed a paradigm of 'by' attaching to AGR
clitics only if the latter raised into Comp.

With the shortcomings of all these approaches, one
possible answer appears to lie in Chomsky's Minimalist
Program approach. The case and theta chain assignment work
very well for Polish data, something that was not as
successfully accomplished in the earlier Case assignment
approach in 'Knowledge of Language' (1986b). The interface
model in MPLT also impacts on the notion of Government and
Binding and barriers, following Cinque. With Chomsky's
interface approach, though, other ideas become possible,
such as positing a separate AGR node for gender, number, and
person. Based on Doron's proposal for an AGR Phrase
structure entailing gender, person and number feature
specifications, these can be adapted into the Minimalist
Program perspective to account for the Polish verbal clitic
movement, something previous descriptions have not
successfully accomplished.

'Knowledge of Language' Case Treatment

The first point of divergence in comparing approaches to
Case in 'Knowledge of Language' (Chomsky:1986b) with 'A
Minimalist Program for Linguistic Theory' (Chomsky:1992) is
in the levels of representations. In Chomsky:1986b, there is

D-structure, S-structure, PF and LF, phrase structure and
transformational rules being the rules which generate D- and
S-structure representations, and the rules of PF and LF
components. There is also an assumption of asymmetry present
in the relation of subject and object to the transitive
verb. Though empirical in nature, the assumption is
supported by V-NP movement as a unit, or meaning being
assigned to V-NP compositionally (i.e. throw a fit, throw a
party, etc.). This contrasts with Chomsky:1992 approach of
AGR_S and AGR_O being on 'equivalent footing' as far as
features are concerned. Fundamentally, of course, there is
the basic divergence of the 'Knowledge of Language' (KL)
approach treating Case as a D- and S-structure phenomena, D-
structure for inherent and S-structure for structural Case.
Raising is obligatory in terms of Case theory that every
lexically realized NP must be assigned (abstract) Case. In
some languages (i.e. Polish) Case is morphologically
realized. Even in languages that do not realize Case
morphologically, the assumption is that Case is assigned in
a uniform way. Thus, objective Case is assigned to the
object of a verb, nominative to the subject of a finite
clause, oblique to objects of preposition. Subject position
of a finite clause saves a Caseless NP when it is moved into
the position from an intransitive verb object position (i.e.
verbs like 'seem'). If a language permits another Case to be

assigned to the complement NP, then there will be no
movement, such as in Spanish or Italian, both null subject
languages (as is Polish) which permit an empty subject to
remain in place, associated with the object of the
passivized verb to which it transmits nominative Case.

(112) e was see-en Bill (by John)

Chomsky in KL does suggest parametric explanation to
determine the choice of α in Move-α, as in wh movement in
Japanese at LF and in English overtly. The differences would
lie in S-structure, with Japanese-Chinese having S-structure
same as D-structure and English S-structure being same as
LF.

There is also an adjacency requirement on Case in KL.
Using X-bar theory, Chomsky puts forth a principle that
where Case is not morphologically realized, a Case marked
element must be adjacent to its assigner (with some
variations). Thus *'put [on the table] [the book]' has 'on
the table' interfering between a Case assigner and an
assignee. With morphological Case realization the equivalent
construction in Polish would be well-formed.

A Visibility condition is also imposed. Relating to
theta theory, it states that a noun phrase can receive a
theta role only if it is in a position to which Case is
assigned, or is linked to such a position. Lexical
arguments, therefore, must have Case, or they will not

receive a theta-role and will not be licensed. Chomsky considers the Case filter to be eliminated as an independent principle, as it follows from the Visibility condition.

A chain at S-structure becomes a 'history of movement' of an element as it is moved from the A-position it occupied at D-structure to its S-structure position. Theta roles and Case are assigned to chains, with the chain headed by a Case marked position and terminating in a theta position. The application of this can be seen in data examples (108a-b), (109a-b) and (110a-b) above. Case is then transferred from the head to the terminal position of the chain, making the terminal position visible to receive a theta role, which then transfers to the argument that heads the chain. Case transfer will occur in 1. Chains and 2. Pairings of argument and expletive (i.e. 'there is a man in the room').

In KL as in MPLT, Chomsky put forth the notion of full interpretation (FI). In KL, FI requires that every element PF and LF, taken to be the interface of syntax with the systems of language use, has to receive an appropriate interpretation, i.e. it must be licensed in the sense that is indicated (Chomsky:1986b:98).

If language assigns to each expression a structure (D,S,P,L--D-structure, S-structure, PF and LF) D will satisfy one formal and one general condition. Formal in that

it conforms to the principles of X-bar theory, and semantic
in that it is a pure representation of the theta structure.

P and L must satisfy FI, i.e. each element must be
licensed in an appropriate way.

Regarding S-structure, Chomsky says that many of its
properties 'may be reducible to the independent condition of
FI holding of PF and LF representation and the conditions on
D-structure, given an appropriate account of the ways in
which the elements....may be related' (Chomsky:1986b:101).
This echoes the FI and PF, LF interface in MPLT.

Case is uniformly assigned under government. A category
governs a maximal projection X'' if α and X'' c-command
each other. If α governs in this way, it will then govern
the specifier and the head X of X''. A head α, then,
governs its complements (the core case of government). In
the following construction [$_{VP}$ V NP], where NP= [$_{NP}$ DET [$_{N'}$
N...]], V will govern NP, DET, and N. Subject and predicate
govern one another, but only lexical categories and their
projections can be governors: i.e. N, V, A, P, NP, VP but
not the complementizer or infinitival INFL. AGR, assumed to
be nominal, in that it has feature of person, number, and
gender, can govern the subject (Chomsky:1986b:162).

The KL approach distinguishes structural Case from
inherent Case in terms of S-structure position (the former)
and D-structure position (the latter). Chomsky also assumes

that the direction of Case marking is uniform, in marked
cases corresponding to the head parameter of X-bar theory.
In English this works fine, except for the genitive Case.
Therefore, KL distinguishes Case-assignment(at D-structure)
from Case realization (at S-structure) for genitive. Both
would fall under government: with N governing and theta-
marking its complement and assigning Case at D-structure,
and N governing both the complement and the subject at S-
structure, so that Case assignment is possible in either
position.

Inherent Case and Specificity

There are some problems with specifying a Case as
inherent or structural. Chomsky does not explain the
assignment of inherent Case by verbs, like 'helfen' in
German assigning the dative instead of accusative, or
'persuade' assigning genitive as an inherent Case to its
second object, as (113).

(113) I persuaded John [of the importance of going to
college].

Lasnik (1992) expounds on Chomsky's KL approach to Case
assignment by raising V-to-I.

(114) [[a car][Tense be$_1$][not t$_1$ here]]

Such structures would have operation limited to [+aux] verbs, following SPC. With expletives, Lasnik postulates that 'unaccusatives' and 'be' is a Case assigner (389), with no Case transmission but direct Case assignment, with the difference in auxiliary verb raising. We would have the following construction.

(115) ?There arrived a bus.

(116) There is usually a man here.

Adjacency effect is apparent in the following:

(117) *There arrives usually a bus (at this time).

With (116) allowing raising, and therefore leaving a t, there would be no such effects.

There have been suggestions of multiple Case-assigning possibilities for individual verbs, or an affix having the ability to assign a particular Case. Turkish and Hebrew data show that verbs can assign both accusative and partitive Case. The crucial condition is specificity, with specific objects being marked accusative, and non-specific having no overt Case marking (Lasnik:398).

(118) Ali bir piyano-yu kiralamak istiyor.

    Ali one piano-ACC to rent   wants

    'Ali wants to rent a (particular) piano'

(119) Ali bir piyano kiralamak istiyor.

    Ali one piano to-rent wants

    'Ali wants to rent a (non-specific) piano'

This suggests that accusative Case can be associated with a semantic property (specificity) with the implication that semantic properties are not limited to inherent Cases.

Other languages support this:

Hebrew has a morpheme 'et' which shows up on specific objects and is analyzed as accusative, while a non-specific object will have no overt Case morphology (Lasnik:398).

In Polish, verbs that assign accusative must assign genitive when they are negated, making it a structural not inherent phenomenon. There is a specificity condition in Russian, with 'definiteness' communicated by retention of accusative, with genetive being assigned in its absence. The structural aspect of this assignment is also argued on the . grounds that non-theta-marked expressions of duration may also get 'genitive of negation, as long as they are not governed by the negated verb. Also, there are some verbs, i.e. in Russian 'pomagat' ('help'), and in Polish 'pomagać', which assign oblique Cases to their objects, marking their object dative and in Russian 'upravljat' ('manage'), marking its object with the instrumental Case. Neither of these will alternate with a genitive when they are negated, meaning that they are inherent.

(120) (a) (My)   pomagały=śmy   mu.

             we-NOM help-PASTP1f1Pl him-DAT

             'we were helping him'

       (b) (My)   nie pomagały=śmy   mu.

             we-NOM NEG help-PASTP1f1Pl him-DAT

       (c) My=śmy   pomagały   mu.

             we-Cl1Pl help-PASTP1f him-DAT

       (d) My=śmy mu pomagały.

       (e) My=śmy mu nie pomagały.

       (f) ?My mu=śmy pomagały.

       (g) ?My mu=śmy nie pomagały.

In examples (120f) and (120g) the pronoun is already
inflected for Case (dative) when the verbal clitic cluster
attaches to it, which would be supported by Chomsky's
suggestion that parametric properties are located
exclusively in the functional portion of the lexicon, the
substantive portion being invariant (Lasnik:401). Therefore,
when negation of a verb changes the Case assigned by it,
that has to be specified in the lexicon. In 'Minimalist
Program for Linguistic Theory' this is echoed in the
features of lexical items being present in the lexicon, with
morphological requirements being the driving force.

Some Issues of Government and Binding

Toman (1986) posited two distinct syntactic structures, the specifier-head structure for cardinal number phrases, and head-complement structure in the case of pseudo-quantified phrases as in those with 'cely', 'cela' (142-144). The former would be analyzed in syntax, the latter would be reanalyzed at the level of Logical Form. Cinque (1990) posits the notion of D-linking, which sheds some light on Q-phrase movement.

Cinque posits the notion of 'referentiality' (taken to mean the ability to refer to specific members of a set in the mind of the speaker or in a pre-established discourse) to subsume the notion of D-linking. This linking impacts on conclusions about wh-phrase behavior at LF, and is consistent with Q-phrase movement at S-structure. Thus, only D-linked (referential) phrases can enter into a binding relation, at LF or at S-structure, and non-D-linked (non-referential) phrases can only enter chains of antecedent government relation, at both LF and S-structure. D-linking implies co-referentiality, as is evidenced in the following examples taken from Cinque (17).

(121) (a) Which boy$_i$ started a fight with which girl$_j$
wasn't clear even to them$_{i+j}$.

Since 'which boy' is D-linked, there is co-referentiality.

(b)*Who$_i$ started a fight with whom$_j$ wasn't clear
even to them$_{i+j}$

'Who' is non-D-linked, therefore there is no co-referentiality.

Extraction of interrogative phrases in indirect questions depends on the character of the extracted wh-phrase. Only D-linked (referential) wh-phrases can enter a binding relation with their trace, thus their insensitivity to wh-islands (i.e. weak islands). Non-D-linked (non-referential) wh-phrases, on the other hand, can only move successive-cyclically, thus their sensitivity to weak islands. This account can explain the asymmetry between questioning (* or ?) and relativization (? or) since the relative wh-phrase can be more easily referential than the interrogative wh-phrase, the latter behaving more like a non-referential operator.

In order for a phrase to enter a binding relation with its trace, it has to occupy an A-position, receive a referential theta role, and have intrinsic referential properties. Thus NP's in NP-Movement (like Passive, Raising, etc.) and Clitic Movement are in A-position and receive a

theta role at S-structure. They have to enter a government-type rather than binding-type relation because of the independent requirement of theta-role and Case transmission being a property of chains, and chains can be defined in terms of antecedent government. In A'-relations there is no theta-role and Case transmission. Therefore, antecedent government is not forced on them. Traces of NP-Movement and Clitic Movement, in contrast to variables, are not referentially autonomous--they are parts of a discontinuous referential element, i.e. the A-chain.

According to the 'Barriers' framework, sensitivity to strong (and weak) islands of the successive cyclic Wh-Movement results from the requirement that each link of the successive cyclic chain satisfies antecedent government. The sensitivity of long Wh-Movement to strong islands follows from the separate principle of Subadjacency.

Antecedent government then in the 'Barriers' model would be:

(122) α governs β iff α m-commands β and there is

no γ, γ a barrier for β, such that γ excludes α.

(Chomsky:1986a:9)

Subjacency would be:

(123) β is subjacent to α iff there are fewer than two barriers for β that exclude α.

(Chomsky:1986a:30)

This attempt at unification is not complete, however. There is an asymmetry if one barrier suffices to derive strong islands for government, but two are needed to derive the islands for Subjacency. Also, two notions of barrier are postulated, with the 'minimality' barrier for government and a weak barrier for Subjacency (i.e. embedded IP or CP). Furthermore, 'the notion of barrier holding of government and Subjacency can be given a unified definition only at a certain cost' (Cinque:22).

Cinque shows barriers by inheritance to be redundant, since there exist cases where only one (inherent) barrier triggers Subjacency as in the following.

(124) a. *To whom were they [AP too angry [CP PRO to talk t]]

b. *To whom were they AP angry enough [CP PRO not to talk t]]

These are degree clauses, i.e. strong islands.

Since there are at least three strong islands where one inherent barrier is sufficient to trigger a bounding violation, and since all other strong islands contain an inherent barrier on top of a barrier by inheritance (IP, NP), then barrier by inheritance will become redundant for bounding. Unfortunately for the unification attempts, there is a residue, weak islands, which constitute a barrier for bounding (Cinque:29).

In the 'Barriers' approach, following the unified notion of inherent and inherited barriers, this residue is expressed in the difference in the number of barriers relevant for government (one) and for bounding (two). There is a cost to this, not just in the redundancies, but in the fact that expressing the difference between the two theories in the number of barriers crossed will fail in some cases, where even for bounding one barrier will be sufficient. Therefore, instead of taking the notion barrier to be the same with only the number of barriers differing in the two theories, Cinque proposes that 'one can envisage the possibility that the notion of barrier itself is (partially) different for the two theories, while the number of barriers involved remains constant (one) (29). He expresses the difference between government and binding in that strong islands are barriers to both government and binding, since they are neither L-marked nor theta-marked maximal projections. Weak islands are barriers to government but not to binding, since they are not L-marked, but they are theta-marked maximal projections. Dyla posited an S-deletion in Polish in order to deal with Case assignment data which seemed to be violating bounding nodes, while Cinque's approach addresses the process of government and binding and shows that Dyla's data can be more elegantly dealt with in terms of strong islands and weak islands, and theta marking.

Cinque also takes on adjunction to VP and IP, by finding a 'principled reason' why they behave like L-marked maximal projections, marked by a [+V] category. XP's that are directly theta-marked by some head are c-selected, ultimately being s-selected, by that head, as are indirectly theta-marked XP's. VP and IP are c-selected by I and C, even if they are not s-selected by them. I can only take VP as a complement, and C nothing other than IP. Even if IP is split into Tense and AGR, C will c-select AGR P, AGR TP, T VP. This opens up the possibility of using the notion of c-selection in defining barrier for government--direct selection. For lexical categories this will result in direct s-selection, for non-lexical direct c-selection. Though I and C are not intrinsically [+V], they are compatible with [+V] elements. In some languages they can host verbs. They can therefore be treated as nondistinct from [+V] categories (41).

Cinque thus defines government and binding barriers in the following way:

(125) Definition of barrier for government (final):

Every maximal projection that fails to be directly selected by a category nondistinct from [+V] is a barrier for government.

The general notion of selection can also be formulated here, subsuming direct and indirect theta-marking.

(126) Definition of barrier for binding (final):

Every maximal projection that fails to be
(directly or indirectly) selected in the canonical
direction by a category nondistinct from [+V] is a
barrier for binding.

The ineliminable difference between the notions of
barrier is then constituted by:

1. 'Direct selection' for government versus 'direct or
indirect' selection for binding.

2. 'Canonical direction' requirement, for binding alone.

The Minimalist Program

In "A Minimalist Program for Linguistic Theory", Noam
Chomsky pares down his EST approach to structural
descriptions as sequences, and representations at D-
structure, S-structure, PF and LF, to two interface levels.
Embedding language in performance systems (therefore
allowing expressions to be used in articulating,
interpreting, referring, etc.), SD's became a set of
instructions to these systems, providing information needed
in their functions.

There are two general types of performance systems: 1.
Articulatory-perceptual (PF) and 2. Conceptual-intentional
(LF). These two systems have their instructions provided for

them by two linguistic levels, the interface levels PF and LF (A-P and C-I respectively).

Chomsky's other standard assumption here is that there are two components in a language: a lexicon and a computational system. Derivation entails choosing an item from the lexicon and then choosing a computation that constructs the interface representation pair from the A-P (PF) and C-I (LF) levels. Variation is limited to the lexicon only (nonsubstantive parts of it). Thus only one computational system and one lexicon are necessary.

The principles-and-parameters approach is assumed by Chomsky with UG providing 'a fixed system of principles and a finite array of finitely-valued parameters'(1992:5). The choice of values for the parameters is reduced by language-specific rules. This eliminates the notion of grammatical construction (i.e. verb phrase, relative clause, passive). These constructions are now explained through the interaction of UG principles with the language-specific parameter values.

The minimalist program determines what a possible derivation and a possible derived object is by excluding all possibilities except those that satisfy the interface conditions in an optimal way. Then the only possibilities are PF and LF, and not D- and S-structure representation of the EST framework, the minimalist approach doing away with

D- and S-structure. Chomsky further restricts the status of
PF and LF by narrowing their legitimacy. They cannot both be
legitimate unless they can be paired. A derivation converges
only if it converges at PF and LF, (convergence being taken
as yielding a legitimate SD). Convergence is determined by
independent inspection of the interface levels. Chomsky also
gets rid of the "well-formed" classification, treating the
concept of grammaticality as having no significance.

X-bar Theory, taken as being fundamental, is the form
items from the lexicon are presented in, making them
accessible to the computational system. Projections of heads
selected from the lexicon compose the X-bar structure. Basic
relations involve the head as one term and are typically
local. Chomsky treats the head-complement relation as 'more
local' (being associated with 0 relations) and the SPEC-head
relation as 'elsewhere'. Other relations are the head-head
(verb to head of NP complement (selection)) and the 'chain
link'. The minimalist program wants to dispense with the
notion of head-government, therefore it needs to account for
the relations which require head government in some other
ways. This impacts on Case Theory.

In standard treatment SPEC-head relation determined
structural Case for the subject position, with the object
position receiving Case under government (by V) including
ECM constructions. Contrary to previous treatments (like

LGB) where Case was unified under government and understood as m-command that includes SPEC-head relations, in the minimalist approach m-command plays no role. All these instances of structural Case assignment are redone in unified X-bar theoretic terms, under SPEC-head relation. Pollock's (1989) inflection theory fulfills the need if his clause structure is adopted:

(127)
```
        CP
       /  \
    SPEC   C'
          /  \
         C   AGR_s''
             /  \
          SPEC  AGR_s'
                /  \
            AGR_s   TP
                   /  \
                  T   AGR_o''
                      /  \
                   SPEC  AGR_o'
                         /  \
                     AGR_o   VP
```
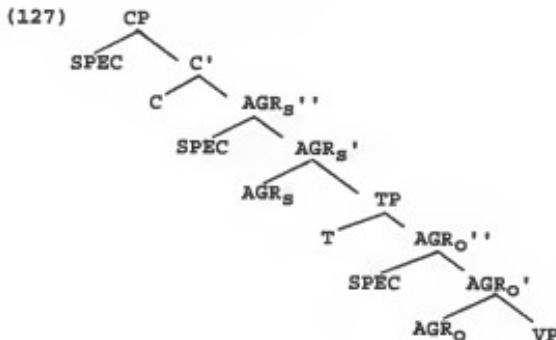
SPEC-head relation (NP, AGR) then manifest both agreement and structural Case. Case properties will be dependent on T and V of VP characteristics. T will raise to AGR_s, which will yield $[_{AGR}$ T AGR$]$ and V will raise to AGR_o yielding $[_{AGR}$ V AGR$]$. These will form the complex which includes the 0 features of AGR (gender, number, person) and the Case feature provided by T and V. This will result in a symmetry between the subject and the object inflectional systems. Chomsky here overlooks the possibility of an NP

raising to [SPEC,T] for Case assignment and then raising to AGR_S for agreement features, a possibility I also ignore.

Looking again at (127), AGR in the minimalist program would be abstracted as a common property of adjectival agreement and the subject-object inflectional systems. The Case Filter, in whatever version, will call for two occurrences of AGR if two NP's in the VP will require structural Case. The arrangement will follow the structure of CP in (127). If there is only one NP, then one of the two AGR elements will be 'active', with the other inert or maybe missing. There will be two options, depending on whether the language in question is Nominative-Accusative or Absolutive-Ergative. For the subject of a transitive clause (Nominative-Accusative languages) AGR_S will be the choice. For the Absolutive-Ergative languages AGR_O will be selected with properties of the object of a transitive clause for the NP. According to Chomsky, the distinction between the two types of languages is a question of morphology.

The element, be it AGR_S in Nom/Acc languages or AGR_O in Erg/Abs languages, will typically assign a less-marked Case to its SPEC, SPEC being higher in the extractability hierarchy. The less-marked Case will be compensated by richer overt agreement, i.e. richer with Nominative and Absolutive than with Accusative and Ergative. This is treated by Chomsky as a tendency.

Licensing of pro will take place in the SPEC-head relation to a strong AGR$_s$ or when it is governed by certain verbs V*. Thus pro is licensed only in SPEC-head relation to [$_{AGR}$ αAGR], where α is [+tense] or V, AGR strong or V=V*. This will place pro under Case Theory, also extending to PRO.

The minimalist approach also makes the concept of government dispensable, with head-government being 'naturally' expressed in terms of the more fundamental notion of X-bar Theory, and antecedent-government being taken as a property of chains, expressed in terms of c-command and barriers. Local X-bar theoretic relations to the head of a projection would take care of head-government and chain-link relation would take care of antecedent-government.

ECM by a V is interpreted as raising of NP to the SPEC position of the AGR P dominating V. Since Chomsky assumes the VP-internal subject hypothesis (also followed by Ouhalla and Ciszewska for Arabic and Polish respectively), this raising of object to [SPEC, AGR$_O$] and subject to [SPEC, AGR$_s$] will result in crossing instead of preserving nested paths. This crossing is the only answer possible to keep the object NP from being 'frozen in place', unable to get Case if it cannot be raised to [SPEC, AGR$_O$] where a trace of the moved VP internal subject NP is. The subject NP has to cross

to [SPEC, AGR$_S$], leaving the [SPEC, AGR$_O$] for the object NP

to move into to get Case by checking. V would move into

AGR$_O$. This is made possible by the notion 'shortest

movement' stated as (128) from Chomsky (1992:24).

(128) If α, β are in the same minimal domain, they are

equidistant from τ.

Therefore, two targets of movement are equidistant if

they are in the same minimal domain. Minimal domain would

include only categories locally related to the heads.

Complement domain would be the subset of the domain

reflexively dominated by the complement of the construction,

and domain of a head (α) is the set of nodes contained in

MAX (α) that are distinct from and do not contain α.

(129)

```
                    XP_1
                 /       \
              UP          XP_2
                        /      \
                     ZP_1       X'
                    /    \      /  \
                  WP     ZP_2  X_1   YP
                             /   \
                            H    X_2
```
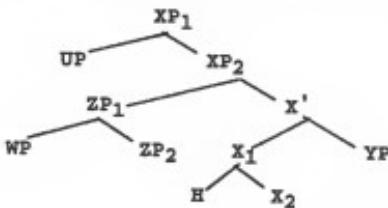
(1992:15)

Minimal domain of X is {UP, ZP, WP, YP, H}, the

complement domain is YP and the residue is {UP, ZP, WP, H}.

The complement domain of X is its <u>internal domain</u> and the

residue domain is its <u>checking domain</u>. This terminology

indicates that the internal domain contains elements that

are internal arguments of α, while the checking domain is

involved in checking inflectional features. In order to keep
the checking domains from being 'redefined' every time one
of its elements (if it is a nontrivial chain) is moved, the
notion is defined <u>derivationally</u> not <u>representationally</u>. In
this way in (129), head H will have no minimal, internal, or
checking domain because it has raised from another position
to form the following chain CH= (H,.... $\underline{t}$) with subdomains
being assigned for the position that $\underline{t}$ now occupies. If in
analyzing (129) we take X to be a verb, then YP is an
internal argument of X, and is the only element in the
internal domain of X. If we take X to be AGR and H is a verb
raised to AGR thus forming a chain CH=(H,$\underline{t}$), then the
specifier (ZP) and UP and WP, being adjoined, of the
checking domain of X and the chain CH will get agreement
feature by local relation to X and will get Case features by
their local relation to CH. What Chomsky proposes is that
generally V will raise to AGR$_o$, thus forming a chain
CH$_v$=(V,$\underline{t}$). The complex [V AGR$_o$] ultimately raises to adjoin
to AGR$_s$. The subject in [SPEC, AGR$_s$] is in the checking
domain of AGR$_s$ and therefore will agree indirectly with V.

This again underscores Chomsky's notion in the
minimalist program that 'the basic elements of a
representation are chains', either one-member or nontrivial
(1992:18):

(130) CH= (α_1,...., $\alpha_{\underline{n}}$) with $\underline{n}$ > 1.

Move α then can be restated as 'Form Chain'. Successive cyclic _wh_-movement of arguments won't treat intermediate steps as adjunct movement, which it would if it were a sequence of applications of Move α.

All conditions are interface conditions, with a linguistic expression being the optimal realization of such interface conditions. A representation π at PF has to satisfy the condition of <u>Full Interpretation</u> (FI). If there is a failure, it's because π fails to give appropriate instructions to the performance systems. FI is then a convergence condition. A derivational D converges at PF if it satisfies FI. If it does not (i.e. a [+high, +low] vowel, the D will crash. PF is a representation of universal phonetics, having no indication of syntactic elements and their relations, i.e. binding, government, etc. A PF representation π must be construed of <u>legitimate PF objects</u>. Likewise at LF, each legitimate object is assumed to be a chain CH=($\alpha_1, \ldots \alpha_n$), Ch being a head, an argument, a modifier, or an operator-variable construction. A representation λ satisfies FI at LF if it consists only of legitimate objects, i.e. a derivation λ converges at LF if it satisfies LF. If not, it crashes. Chomsky states quite emphatically that 'expressions have the interpretations assigned to them by the performance systems in which language is embedded: period' (1992;38).

Nouns are drawn from the lexicon with all their
morphological features, including Case and 0 features, and
these are checked in appropriate positions, here at
specifier of AGR, which may include T or V. Then DP is
paired properly with V. Morphological features appear to be
the decisive element, i.e. variation 'follows only from
morphological specifications of lexical items'
(Uriagereka:118).

The morphological features of Tense and AGR have two
functions: 1. They check properties of the verb that raises
to them; and 2. They check the properties of the Noun Phrase
(DP) that raises to their specifier position.

Case as an S-structure condition was postulated on the
grounds that Case features appear at PF but must be visible
at LF. Therefore Case must be present by the time the
derivation reaches S-structure. Under checking theory that
argument will collapse: the assumption is that the Case
Filter is an interface condition, a condition that all
morphological features must be checked for convergence,
somewhere. Similarly, S-structure conditions on
raising/lowering are gone. Instead, we have morphological
properties of lexical items.

Parametric variation of wh- in situ will not exist:
language differences will be reduced to morphology, i.e. the
internal morphology of wh-phrases. Chomsky assumes that

operations are 'driven by morphological necessity: certain features must be checked in the checking domain of a head, or the derivation will crash' (1992:45). Operator raising to specifier of CP has to be, therefore, driven by such a requirement. The assumption is that C may have an operator feature (either Q or _wh_-) and this feature is a morphological property of operators such as _wh_-. For an appropriate C, operators are raised for feature checking to the checking domain of C: [SPEC, CP] or adjunction to a specifier (absorption). This will satisfy their scopal properties. If the operator-feature of C is strong, it will result in overt movement.

Looking at economy of representations, the principle is FI: every symbol must receive an 'external' interpretation by language-independent rules. Therefore, there is no need for the Projection Principle or Theta-criterion at LF, since they play no role here.

Derivations are legitimate only if they are necessary for convergence. NP raising, then, is driven by the Case Filter, assumed to apply only at LF: if the Case feature of NP has already been checked, NP may not raise (1992:46). To see this, consider (131).

    (131) (a) There is [$_\alpha$ a strange man] in the garden

          (b) There seems to [$_\alpha$ a strange man] [that it is
               raining outside]

In (131a), α is not properly positioned for case
checking. It raises at LF, adjoining to LF-affix there and
leaving the trace t. The phrase α is now in the checking
domain of the matrix inflection, the matrix subject at LF
being [α-there]. It is an LF word with all features
checked, but they are interpretable only in the trace t
position of the chain (α,t), the head being 'invisible'.

In (131b), on the other hand, α satisfies Case
properties internally to PP, therefore it is not allowed to
raise, and there remains free-standing. Semantically there
has no interpretation, and even though it is in a theta
position it is unable to receive a theta role. The
derivation will converge but will emerge as semi-
intelligible. There can be no 'rewriting' to make a
derivation intelligible. Derivations are driven 'by the
narrow mechanical requirement of feature-checking only, not
by a 'search for intelligibility or the like' (1992:47).
Move α will apply to an element α only if the morphological
properties of α itself are not satisfied. Movement to
benefit other elements is not allowed.

The minimalist approach has moved toward a theory of
generalized transformation (GT). Substitution has the
property that complements can be introduced cyclically,
before wh extraction, whereas adjuncts are introduced
noncyclically, adjoined to the wh-phrase after raising to

[SPEC, CP]. Again, _wh_ movement is driven by morphological necessity.

The AGR Features Approach

Chomsky assumes AGR to be nominal, in that it has features of person, number and gender (1986b:162). In addition it can govern the subject. At the same time, Edit Doron (1986) proposed the phonological realization of feature bundles in dealing with clitics in Hebrew.

(132) dani hu ha-more

     Dani he the teacher

     'Dani is the teacher'

The above structure is analyzed as a nominal sentence. In it hu 'he', pronoun 'Pron', is a clitic which is the phonological realization of 'unattached' agreement features that have absorbed Case' (Doron:313).

The sentence does not contain a copula since the present tense conjugation for 'be' h.y.y. is not available in Modern Hebrew. In past or future 'be' is obligatory.

(133) dani yihe   more   ba-universita

     Dani will-be teacher at the university

     'Dani will be a teacher at the university'

Pron cannot be analyzed as a suppletive form of 'h.y.y.' since the following presents evidence against it.

(134) (a) *dani hu yosev ba-kafeteria leitim krovot

        Dani he sitting in-the cafeteria often

(134) (b) dani haya yosev ba-kafeteria leitim krovot

        Dani was sitting in-the cafeteria often

This parallels Polish in terms of Doron's unattached AGR Features, the 'Pron' as a clitic being a phonological realization of a feature bundle:

{[person][number][gender][Case]}, but not an independent NP node.

    Polish {[person][number][gender] ([Case])} features will appear in the following paradigms (Szober:222-225):

(135)

Case	1Sg	2Sg	1Pl	2Pl
Nominative	ja	ty	my	wy
Genitive	mnie,	ciebie	nas	was
Dative	mnie, mi	tobie, ci	nam	wam
Accusative	mnie, mię	ciebie, cię	nas	was
Instrumental	mną	tobą	nami	wami
Locative	(o) mnie	(o) tobie	(o) nas	(o) was

Third person singular paradigm:

(136)

	masculine	feminine	neuter
Nominative	on	ona	ono
Genitive	jego, go, niego	jej, niej	jego, go, niego
Dative	jemu, mu, niemu	jej, niej	jemu, mu, niemu
Accusative	jego, go, niego	ją, nią	je, nie
Instrumental	nim	nią	nim
Locative	(o) nim	(o) niej	(o) nim

Third person plural paradigm:

(137)   masculine-animate   feminine-neuter-non-animate

Nominative   oni   one

Genitive   ich, nich   ich, nich

Dative   im, nim   im, nim

Accusative   ich, nich   je, nie

Instrumental nimi   nimi

Locative   (o) nich   (o) nich

The pronouns are all marked for Case.

Polish appears to have a non-recoverable gender feature
in non-past formation for 3rd Person Sg and Pl. Hebrew
diverges in the future tense, since there is a copula
available for it. In Polish, on the other hand, future is
formed from a compound construction of 'byc' in the future +
infinitive. The 'byc' construction does not realize gender
features, the Hebrew future construction does. Compare (133)
above with the following:

(138) Dani będzie   nauczycielem na uniwersytecie.

      Dani be-FUT3Sg teacher-Inst at university

      'Dani will be a teacher at the university'

(139) Dani będzie   czytać w bibliotece.

      Dani be-FUT3Sg read   in library-Loc

      'Dani will read in the library'

Looking back at data examples (9-32) in Chapter 1, no
co-indexing is possible for the clitic chain with AGR in

INFL as part of the chain: since gender is not phonologically realized, movement will be barred. Non-recoverability will * those sentences which won't match AGR gender features with the moved clitic, since these features are phonologically 0. AGR=A' position, scrambled object NP is in A' position and in Comp of CP also A'. Postulating an A' position would bar an intervening A position head from invoking minimality.

A possible solution to clitic movement:

(140) [[$_{INFL}$ [$_{AGR}$ [person] [number] [gender]]]$_i$

where the feature bundle is coindexed with either 'ze$_i$' in Comp for structures (21-32), or the scrambled NP 'ksiazke$_i$' for data (9-20). The ungrammatical examples would be ruled out by the non-realization of the gender feature in the feature bundle. This analysis would also support Lasnik and Saito's observation about the asymmetry in movement from indicative and subjunctive clauses in Polish, with an element in Comp blocking a chain formation for co-indexing.

Cichocki's example in (110) above as well as Dyla's (42-43) also show the scope of cliticization to be CP in Polish. Granted, there is historical data in which AGR clitics appeared only in the main clause, with the -1 stems in the subordinate clause, suggesting the scope of cliticization to encompass the main and subordinate clause (Decaux:32).

(141) Na rzekach   babilońskich tam=o siedzieli

on rivers-LOC of-Babylon there=ClEmph sit-PASTPlm

jeśmy   i   płakali, gdy wspominali Syon

be-orthonic1PL and cry-Plm when remember-Plm Zion

'We sat by the rivers of Babylon and cried when we
remembered Zion'

This example dates from 1400. On closer analysis, rather
than AGR clitic deletion, we have a transitional form of the
verb paradigm, in which the orthonic 'be' is being lost.
This coincides with the appearance of the pronominal which
then transferred the AGR clitics to the main verb. Decaux
notes many variations when the paradigm was in flux, as it
is here, since the pronominal has not appeared yet. As
recently as 1949, Decaux notices regional variations in
coordinate constructions.

(142) (a) gdzie jedliśmy   i   pisali

          where eat-PAST1Pl and write-Plm

          'where we ate and wrote'

      (b) gdzie=śmy jedli i pisali

which is acceptable in the Warsaw dialect for the fully
realized inflectional form 'jedliśmy i pisaliśmy'.

Lasnik and Saito posit a structure of head of CP
coindexing with the CP and blocking a moved element from co-
indexing:

(143) *Co   Maria myśli, że   Janek kupił?

     what Maria thinks that Janek bought

'What does Maria think that Janek bought?'

This would yield the following structure:

(144) [$_{CP}$ że [$_{TP}$ Janek [$_{VP}$ kupił [$_{NP}$ t$_i$]]]]

Failure of theta chains would also account for the

following structures:

(145) Komu=ście Jacek powiedział   (*że) dali

    who-DAT=Cl2Pl NOM say-PAST3Sgm that give-PAST1m

    książkę.

    ACC

    'To whom Jack said you gave the book'

Clitics moving through Comp cannot leave a trace as part

of chain, and the derivation crashes.

Polish exhibits the following crossover effects (Lasnik

and Saito:158):

(146) Co   Maria chce że=by=ś   kupił t?

    what Maria wants thatClCondCl2Sg buy-Sgm

    'What does Maria want that (you)pro buy?'

(147) (a) Co Maria chce, żeby Janek kupił (t)?

       what Maria wants that Janek bought

       'What does Maria want that Janek bought?'

    (b) *Kto Maria chce, żeby (t) kupił chleb?

       who Maria wants that bought bread'

       Who does Maria want that bought bread?'

Ordering of clitic elements has been applied in the
Abstract Clitic Hypothesis for English to account for the
re- I.O. incompatibility in some constructions (Keyser and
Roeper:1992:90-91).

(148) (a) We gave him money.

(b)*We regave him money.

Abstract Clitic Hypothesis (ACH) states:

(149)

a. All verbs in English have an invisible Clitic
position that may be occupied by markers such as the
one we have called dative.

b. Re-, like dative, is one such marker.

Analyzing (148) above would be done in the following
way.

(150) we[$_{VP}$[$_V$[$_V$ give] Clitic] money]

The presence of the clitic blocks formation with re-,
since re- is a marker.

In Polish, postulating co-indexation of AGR bundle
features with elements they attach to appears to follow
Gender Feature Phonological Realization (GFPR). This
condition means that if gender is not phonologically
realized, and therefore not co-indexed, the resulting post
clitic movement construction will be *. Since Polish, unlike
English, has morphologically overt AGR features that can be
co-indexed, their presence or absence can account for the

phenomena observed in movement of Polish verbal clitics. This must combine with the occurrence of 'jest' as a stem of 'być'. Hence the verb clitic movement in Polish is driven by morphology.

CHAPTER 5

PHONOLOGICAL CONSIDERATIONS

Polish clitics exhibit a structured ordering in a given clause. There is leeway as far as pro-clitic or en-clitic placement with the reflexive 'się', the Dative-Accusative sequence of pronominal clitics and the reflexive 'się' with Dative clitics. Decaux (26) specifies the 'mi-się' cluster as invariable, whether the cluster is pre- or post-verbal as in:

(151) podoba   mi   się ta   piosenka
      appeal-PRESSg me-DAT REFL this-f song-ACCSgf
      'This song appeals to me'

(152) to   mi   się podoba
      it-NOM me-DAT REFL appeal-PRESSg
      'It appeals to me'

The conditional clitic 'by' must attach to Comp if there is an element present in it. If it is an AGR clitic cluster it has to follow the tense/gender desinences and precede the person/number desinences.

The matrix clause has the 'by' conditional clitic following '-la', tense-gender-number and preceding the '-m', person number. In the subordinate clause 'by' attaches to the 'gdy' in CP.

(153) Gdy=by był dobry program,

    if-CondCl be-PASTSgm good program-ACCSg

    zosta=ła=by=m.

    stay-PASTSgf=CondCl=1SgCl

    'If the program had been good, I would have stayed'

The cluster of AGR clitics below will be able to raise
leftward up the tree, all the way into 2P position following
Klavans.

(154) ......poszli=śmy

      go-PASTP1m1P1C1

Other Aux. clitics like 'że', which Decaux terms clitic
of insistence, will precede the person-number clitic.

(155) Przyszli=że=ście   szybko do domu.

    come-PASTP1mInsisC12P1C1 fast to home-GENSgm

    'It was fast that you came home'

Univerbation

Phonologically, Polish Agr clitics misbehave as far as
stress and voicing are concerned. There is evidence from
stress that the negative 'nie' exhibits the behavior of a
phonological clitic. In keeping with Polish regular
penultimate stress, the adjective 'niezły' 'not bad' and the
sentence 'nie je' 'He does not eat', present identical

penultimate stress, triggered precisely by the presence of 'nie' (Kipka:139).

Andersen analyzes AGR clitics as undergoing univerbation, morphologically and prosodically.

In the historical process of enclisis of person and number markers Andersen posits two approaches to the outcome of the development which is 'a change in the syntactic properties both of the person and number markers (which became desinences) and of the l-forms (which became stems)' (Andersen:31).

The first approach is to deal with the desinences as allomorphs when they attach to an l-form of the verb, otherwise as enclitics. The second approach, which Andersen favors, is to treat the l-forms as stems and the person and number markers as desinences capable of being moved. Thus, both constituents are involved in the process:

(156) (a) Nigdyśmy tego nie myśleli.

    (b) Nigdy tegośmy nie myśleli.

    (c) Nigdy tego nie myśleliśmy.

    'We never thought that'

Prosodic univerbation is the change by which combination of l-form and person/number marker undergoes the Polish penultimate stress placement rule. Thus, while Old Polish had tmesis, modern Standard Polish has morphological and prosodic univerbation (Andersen:37).

(157) Present tense of 'byc', copula and verb of existence

	Old Polish	Modern dialects	Standard Polish
	tmesis		
1Sg	-(e)m jest	jestem	j'estem
2Sg	-(e)ś jest	jesteś	j'esteś
3Sg	jest	jest	j'est
1Pl	-(e)śmy jest/są	sąśmy	jest'eśmy
2Pl	-(e)ście jest/są	sąśce	jest'eście
3Pl	są	są	s'ą

There are present day dialectal variations in the 1-form and person/number marker combinations, with North/South opposition, the South preserving more archaism.

(158)

Northern dialects	Orthoepic standard	Southern dialects
mów'iłem	mów'iłem	m'ówił-em
mów'iłeś	mów'iłeś	m'ówił-eś
m'ówił	m'ówił	m'ówił
mówil'ismy	mów'ili-smy	mów'ili-smy
mówil'iscie	mów'ili-scie	mów'ili-scie
mów'ili	mów'ili	mów'ili

(Andersen:32)

Historically, Polish has had penultimate stress since around the time of the Middle Ages. This held for 1st and 2nd singular forms (see (157) above). The plural forms had antepenultimate stress, in the 18th century falling under the penultimate rule. This can be viewed as an example of antimony, a language regaining some equilibrium in the Saussurean term (Harris and Taylor:184). Prosodic univerbation becomes relevant in the 1-form and person/number marker combinations. When the syllabic person/marker desinences attach to any other constituent in a given clause they retain their pattern of penultimate stress (Andersen:33).

(159) (a) Wcz'oraj=em prz'yszed-ł

     (b) Wcz'oraj przysz'edł=em

     'I arrived yesterday'

With clitic attachment to 'wcz'oraj' there is no stress shift, but with the clitic attaching to 'prz'yszed-ł' there is a shift.

Voicing and Devoicing

In segmental univerbation we find that affixes behave differently from person/number markers when it comes to voicing of stem final obstruents. Affixes can cause other changes, such as stem vocalism changes, consonant mutations which can then trigger changes in place/manner of

articulation, but they never affect the voicing properties
of obstruents in stem final position.

Since person/number markers are historically different,
they do change the voicing of stem final obstruents. These
rules of voicing and devoicing sandhi apply at + and #
boundaries. The data in (160) and (161) show regional
differences in enclitics voicing across #.

(160)   West and Northeast
                                          South

(a) brat#Adama 'Adam's brother'   [-da-]   [-ta-]

(b) dziad#Adama 'Adam's grandad'   [-da-]   [-ta-]

(161)

(a) jak-em wrociŽ 'when I returned'   [-ge-]   [-ke-]

(b) otkad-em wrociŽ 'since I returned'   [-de-]   [-te-]

In the following data we have a + boundary. In this
paradigm, the third person will be automatically [-voice] if
it is ____#.

(162)   West and South   Northeast

(a) nióśŽ=em 'I carried'   [ńuzem]   [ńusem]

(b) nióśŽ-eś 'you carried'   [ńuześ]   [ńuseś]

(c) nióśl   'he carried'   [ńus]   [ńus]

Another sandhi which has regional variation is the
morpheme -ś- in the person/number marker of the 2nd Singular
and 1st and 2nd Plural. Originally, this segment was [-
voice] and ended in a + boundary. But if sandhi rules apply,

there is no way of knowing, looking at the Polish dialects,
if it is a voicing sandhi or a devoicing sandhi rule. The
Polish imperative shows (de)voicing sandhi applying at word
internal boundary, which happens to be a prosodic word.

(163)   West and South   Northeast

(a) unieśmy 'let us carry' [uneśmy]   [uneśmy]

(b) uwieźmy 'let us remove' [uveźmy]   [uveśmy]

(Andersen:40)

Gussman treats enclitics as displaying 'some of the
phonological properties of a word' (32). This is posited as
an answer to the conditional 'by' voicing an obstruent
across a sonorant as in:

(164)   rze[kwa]a 'she said'

        rze[gwb]y 'he would say'

        ro[sw]a   'she grew'

        ró[zwb]y 'he would grow'

In Gussmann's data, we also find '-że' (particle of
insistence (after Decaux)) voicing an obstruent with a
sonorant intervening.

(165)   jedna[k]oz 'however - jedna[g+ž]e

        ty[r̝] 'of those'   - ty[r̝+ž]e

        pi[š] 'write imper.'- pi[ž+ž]e

        ska[č] 'jump imper.'- ska[dž+ž]e

        (Spencer:32)

Palatalization

Spencer (1986) gives examples of palatalization across both [+] and [#] boundaries. One such palatalization process is the Surface Palatalization, applying postcyclically, across word boundaries in the domain of phrases, palatalizing stops before /i,j/. This process would change /k/ into /k'/, /p/ into /p'/, etc. Cliticization would trigger a Second Velar Palatalization if the velar root is followed by a dative/locative desinence, masculine nominative plural marker and a de-adjectival adverb ending. The Second Velar Palatalization (1986:262) then would be written as:

(166) Second Velar Palatalization

$\check{c}/\check{z}/$ ---> $c/z/$___i,e

$\check{s}/\check{z}/$ ---> $s/z/$___i   nom. pl.

                                   dat./loc.

                                   Adv.

In the end, Spencer posits a morpholexical approach to problematic Polish data. Since allomorphic variation used to be considered phonological in nature, it needs to be restated in the form of redundancy rules defined over listed allomorphs in the lexicon. Previously this variation was treated in phonology with readjustment rules. If Spencer is right in stating that a 'language learner must be allowed at

any stage to project the hypothesis that the variation he is confronted with is morpholexical... rather than necessarily phonological with morphological conditioning' (1986:279), then perhaps the same could be posited for clitics. If they have the capability to influence phonological processes across [#] boundaries, then the process of clitic attachment needs to be differentiated from affixation. Perhaps, following Spencer, this could be done allomorphically in the lexicon. This approach would then leave it to the morphological processes, the driving force in Chomsky (1992), to form the correct utterance. If there is no match in PF, then the derivation would crash.

The 'jer' Vowel

Franks (1985) posits a 'jer' vowel to account for the penultimate stress in Polish and clitics. He states that 'in literary language clitics, such as 1 pl. '-śmy', fall outside the stress domain' (145), therefore won't count in determining penultimate stress.

(167) czytál-i   'read-3 pl. masc. pers. past'

czytá-l-i-śmy 'read 1 pl. masc. pers. past'

czýta-ž   'read 3 sg. masc. past'

czyta-ł-e-m 'read 1 sg. masc. past'

If there is a non-syllabic clitic attaching as '-m' 1sg. to a past -l- stem of a verb, then /e/ appears. This /e/ is

treated by Franks as the realization of a 'jer' vowel. This is in direct conflict with Spencer (1986), who posits an underlying 'jer' vowel that never surfaces in the 'czytal#' forms. Those two approaches notwithstanding, the verbal paradigm of the orthotonic forms (80) above, from Decaux:127, shows that the -e- was present for cliticization, with deletion occurring in [v___] environment.

Gussman (1992) applies the autosegmental approach to solving the Polish syllable consonant cluster in the 'jer' discussion. He puts [+voice] on an autosegmental level, which allows him to link and delink. We can also apply this approach to the ad hoc stipulation in Klavans (1982:99) of 'accent throw back' in Turkish.

(168) (a) básbakan   'prime minister'

derived from:

(b) bás   +   bakán

head   minister

with enclisis =le:

(c) básbakán=la

Klavans makes the stipulation that there is an accent 'throw back' when enclisis occurs. If we treat the problem autosegmentally, stress is present underlyingly but it does not link until the clitic attaches. The autosegmental approach would rid the theory of ad hoc stipulations like

accent 'throw back'. The same solution could be applied to
enclitic =ce causing the word to be stressed like an adverb.

Of course, we have seen in Andersen and Decaux that
regional and dialectal variation plays an integral part in
assigning stress (Andersen). This variation has its base
firmly rooted in the historical dynamics of language change
(Decaux)

Concluding Remarks

Looking towards feature treatments as an answer to
linguistic dilemmas has been a mainstay of linguists dealing
with Slavic Grammar. Roman Jakobson in his 'Russian and
Slavic Grammar' lists some concurrences for verbal
categories. The more striking ones, in light of the subject
of this dissertation, deal with person, number and gender.
Namely, Jakobson sums them up with: 'gender and marked
number (plural) are mutually exclusive. Person and gender
are mutually exclusive....conditional and present are
mutually exclusive' (53). Halle has mentioned inherent
gender features on verbs in Slavic languages in his
writings. With Decaux's (and Andersen's) analyses of the
change in the Polish verbal paradigm, the notion of positing
a separate node for gender is quite plausible. The notion of
gender realization has also been applied by Harris (1991) in
studying exponence of gender in Spanish. There, he posits a

rule of Feminine Marker and Marker Realization, followed by
Syllabification (Harris:52).

The patterning of the verbal clitic movement in Modern
Polish cannot be analyzed without scrutinizing the AGR
features realized on the inflections. Such an analysis will
inevitably have to focus on the gender feature. As we have
seen in Chapter 3, the present day Polish verbal paradigm is
the result of 400 years of linguistic adaptations and
changes. In Old Polish, number and person were separate from
the -l- stem of the verb. The -l- stem of the verb carried
the gender. This would be in keeping with Halle's notion of
inherent gender features on verbs. The BE form, which was
fully present in Old Polish carried the number and person.
Over the last four centuries, person and number desinences
were subsumed by a pronominal and verb, and then by the verb
itself. The 'jest' 'be' forms disappeared, although some
marginal dialects still exhibit the fossilized forms. The
dual role the verb 'być' played in bridging the process of
feature transfer (from the auxiliary, to the pronominal,
with the desinences then attaching to the main verb) as well
as functioning as the verb of existence, for its
transformation into a default auxiliary, propping the
functions of number, but not taking on the features of
person and gender, the latter two moving into existence as -
l- stems and verbal desinences. This default role is the

reason why the data in (33) and (34) in Chapter 1 do not constitute a counterexample. When AGR clitics leave the 'być' construction, the verb takes on the role of number place holder, in that 1st person plural will be realized in the default 3rd plural form in a [-tense] construction.

(169) Dzisiaj jest=eśmy w domu.

today (we) be-PRES1PlCL in home

'We are home today'

(170) Dzisiaj=śmy są w domu.

today=1PlCl be-Pl in home

Looking at the verbal paradigm in (80) above, the 3rd form of the verb, both singular and plural becomes 0 after the 16th century. The [-tense] paradigm for 'być' is marked as archaic and regional, with the more archaic, fossilized forms still found in the Southern part of Poland. Its function in the above construction does not entail person and gender specification, only number, which is the default category. For more acceptable constructions as in (171), the gender feature are marked on a complement, suggesting a chain of co-indexation of features, perhaps forming analogously to the interface conditions in the Minimalist Program.

(171) Ale dziś jest=em wesoła.

how today be-PRES1Sg happy-Sgf

'How happy I am today'

(172) ?/*Ale=m dziś jest wesoła.

(173) Ale=m dziś wesoła.

In comparing (172) and (173), 'być' functions as an
auxiliary only, and in (170) communicates plurality in [-
tense].

Doron's data for a pronominal clitic cluster in Hebrew
lends support to my stipulation of its existence in Polish.
The [-present] requirement mirrors the [+tense] requirement
in Polish, only because of the future verb paradigm
differences, Polish being a compound formation.

Specifying the AGR cluster in the lexicon, following
Chomsky's Minimalist Program, would have the cluster being
derived by choosing a computation that can construct the
interface representation pair from the A-P (PF) and C-I (LF)
levels. This derivation is morphologically driven, and
requires 'jest' and a distinction between person and gender
features. The fixed system of principles and a finite array
of finitely-valued parameters for the AGR clitics would be
the [+tense] specification and the gender feature
recoverability condition. In Minimalist Program terms that
would satisfy the interface conditions, in the optimal way.

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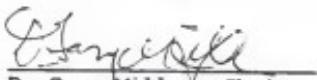
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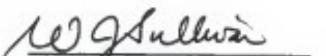
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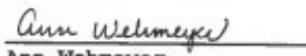
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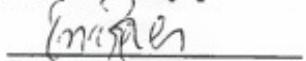
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